

RALEIGH'S NEW DEVELOPMENT CODE DIAGNOSTIC & APPROACH REPORT

PUBLIC REVIEW DRAFT (2/1/10)



MIXED



COMMUNITY



RESOURCES



MOBILITY



JOBS



INFILL

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1. INTRODUCTION



The city of Raleigh has retained a nationally recognized team of consultants to assist in the preparation of a graphically-oriented, easy to understand, unified development ordinance (UDO) to regulate land development throughout the city.

Raleigh is well positioned; having recently completed an ambitious Comprehensive Plan that is rich in its commitment to sustainability, having an abundance of educational and cultural anchors, and access to valuable natural assets, the city is firmly established as a city of choice. As a magnet for both the creative class as well as retiring empty nesters, Raleigh is expecting significant population and economic growth. The unique opportunity presented by this growth must be met with the appropriate rules and regulations to ensure that the growth takes the right form and occurs in the right locations. Raleigh's UDO will contain the rules that guide growth in a sustainable manner that enhances the quality of life, protect established neighborhoods, and curb sprawling settlement patterns.

The 2030 Comprehensive Plan is the key policy document that provides an integrated approach to all aspects of Raleigh's physical development and related economic

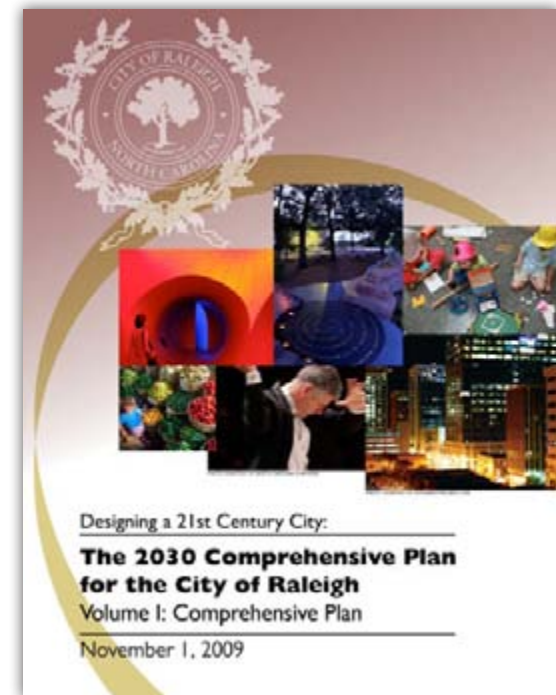
and social issues. In fact, the very first implementation item of the Comprehensive Plan calls for a revision to the city's development regulations. The Comprehensive Plan also seeks to:

- Inspire with bold ideas to help shape development today and tomorrow;
- Provide the basis for orderly, consistent, and predictable land use decision-making;
- Facilitate quality development throughout Raleigh;
- Provide a "greenprint" for more sustainable growth patterns; and
- Build on the ideas and guidance from the many participants in the Planning Raleigh 2030 process.

The 2030 Comprehensive Plan contains more than 145 action items that are either expressly prohibited or obstructed by the policies codified in the current regulations.

It is the goal of the consultant team to use the directive of the Comprehensive Plan to write a new set of rules capable of moving the city forward. In some instances, the UDO will be the primary tool to implement an action item, in other cases the UDO will simply remove burden-

some regulatory hurdles from the existing regulations to allow for easier implementation of action items. In the end, one should be able to trace each provision of the UDO back to the community vision established in the Comprehensive Plan. A complete action item by action item review of the Comprehensive Plan can be found in the Appendix on page 103.



THE COMPREHENSIVE PLAN BECAME EFFECTIVE ON NOV 1, 2009 AND SERVES AS THE FOUNDATION FOR THIS PROJECT.

What is a UDO?

Raleigh adopted its first zoning ordinance in 1923. This ordinance regulated land use and building height and established the following use districts: residence, neighborhood business, business, industrial, and unrestricted. The first Raleigh zoning ordinance was about as thick as a pamphlet and contained basic zoning information. The current regulations have evolved since 1923. Today's development regulations (Part 10) contains hundreds of pages of text and includes rules for such things as off-street parking, loading, landscaping, signage, and other standards such as stormwater controls, tree conservation, subdivision and site planning standards.

Raleigh's UDO will replace the city's existing zoning and subdivision regulations, and other scattered ordinances, rules and regulations, by updating and combining them into one master regulatory document, which will serve as a one-stop-shop for all development-related regulations. A modern UDO encourages the right types of development by making the rules easier to read and understand. Developers know exactly what is expected of them, while existing residents have a better idea of what can be built next to them or in their neighborhood. This increased

predictability reduces the risk for both the developer and the resident. In addition to reducing risk, a state-of-the-art UDO should:

- Incorporate multiple, sometimes conflicting ordinances into one cohesive document;
- Contain a uniform set of consistent definitions;
- Play a significant role in implementing the community vision and plan;
- Integrate procedures that detail the sequence of all development approvals; and
- Include a coordinated system for review and enforcement.

Just as important as understanding the capability of a UDO, is understanding its limits. Often, cities faced with the opportunity to comprehensively evaluate the rules governing how a city grows become overzealous in how they approach the process. The most common reaction is to try to over-load a UDO with provisions that typically fall outside the bounds of zoning and subdivision. For this reason, it is important to establish clear parameters early on in the process of what a UDO should contain and what a UDO should not contain.

What should go into a UDO	What should NOT go into a UDO
<ul style="list-style-type: none"> ■ Zoning Regulations ■ Subdivision Regulations ■ Form-Based Regulations ■ Site Development Standards ■ Landscaping Provisions ■ Historic Preservation ■ Use Standards ■ Natural Resource Protection ■ Sidewalk Provisions ■ Street Cross-Sections 	<ul style="list-style-type: none"> ■ Building Code ■ Fire Code ■ Housing Code ■ Application Fees ■ Application Forms ■ Construction Standards ■ Public Utilities Ordinance

Raleigh's current regulations found in Part 10, Planning, contain much of the substantive information that belongs in a UDO but also contain the building and housing regulations (Chapter 6) that are more appropriately located in another portion of the city's Code of Ordinances.

Purpose and Scope

Raleigh desires to produce regulations that address contemporary development and zoning practices; are easily understood; and support the goals and policies of the new Comprehensive Plan. Raleigh's focus is to establish clear, responsible development regulations with appropriate design criteria that will provide opportunities for innovative and creative approaches to development, while supporting an economically viable and sustainable community. Initial project goals include:

- Creating regulations that provide a means of implementing the policies and goals of the 2030 Comprehensive Plan;
- Creating regulations that address market trends, incorporate best practices and address contextual issues throughout the city;
- Removing or amending outdated standards;
- Consolidating uses or use groups;
- Creating clear definitions and terminology;
- Providing graphics and illustrations to supplement written regulations; and
- Crafting regulations that provide for effective enforcement by administration.

As with any major project, one of the early fundamentals is to establish a baseline of current conditions against which to mark success. This report provides that baseline. The consultant team has established eight organizing principles for the UDO and evaluated Raleigh's current regulations and handbooks, as well as the Comprehensive Plan, small area plans and streetscape plans, and available community comments against these organizing principles to identify gaps and obstructions to the implementation of the Comprehensive Plan and relevant national and North Carolina best practices. The eight organizing principles are as follows:

- Mixed Use Places (see page 9)
- Communities, Not Subdivisions (see page 23)
- Resource Protection (see page 33)
- Transportation and Mobility (see page 41)
- Retaining & Attracting Jobs (see page 51)
- Rules for Older Areas (see page 57)
- Process and Administration (see page 67)
- Coding Approach (see page 73)



Basis of Analysis

This technical assessment of Raleigh’s current regulations are based on:

- A review of a wide variety of development-related codes, ordinance and plans;
- Interviews and comments from staff, external stakeholders, the general public, and elected and appointed officials; and
- A bus tour of Raleigh.

The independent analysis allows the consultant to make recommendations to address inadequacies in the current regulations. These recommendations represent potential solutions that may or may not necessarily be acceptable in Raleigh but serve as the starting point for discussion of specific problems. The input received from stakeholders, staff, the general public, and elected and appointed officials offer an invaluable local perspective on deficiencies of the existing system. Each stakeholder has insight into what is working and what is not working with the current regulations. By establishing an open dialogue, the consultant team was able to piece together a more complete picture of what is happening and what the community wants to see happen.

A detailed review of the 2030 Comprehensive Plan allows the consultant team to fully understand and incorporate the established community vision into the policy approach of the UDO.

Review and study of plans and regulations provide the facts, but touring the city provides the context. The consultant team toured Raleigh over the course of two days and was able to see the results of the current development regulations. This allows the consultant team to match real built projects with the details of the current regulations.



THE CONSULTANT TEAM PARTICIPATED IN A BUS TOUR OF THE ENTIRE CITY.

MATERIALS REVIEWED IN THE PREPARATION OF THIS REPORT.

RULES AND REGULATIONS
City Charter
Code of Ordinances (Part 10, Part 11, Part 8, Part 6, Part 4)
REGULATORY HANDBOOKS
Streets, Sidewalks, and Driveway Access (SSDA) Handbook
Solid Waste Services Design Manual
CITY-WIDE PLANS
The 2030 Comprehensive Plan
Bicycle Plan
STREETSCAPE AND AREA PLANS
Cameron Village Streetscape Plan (2003) and Plan Amendment (2008)
GlenLake Office Park Streetscape Plan (2001)
Glenwood South Streetscape Plan (2000) (revised 2008)
Oakwood Mordecai Business District (1987 with amendments through 2006)
Peace Street Streetscape Plan (2005)
Promenade at Crabtree Streetscape Plan (2002)
Southeast Raleigh Streetscape Master Plan (2004)
Stanhope Center Streetscape and Parking Plan (2002)
University Village Streetscape Plan (1986 with amendments through 2004)
Hillsborough Street Plan (1999, 2008)
Downtown Parking and Transportation Master Plan
Downtown Streetscape Master Plan (1991)
South End Master Plan
Liveable Streets Plan (2003)
Neuse River Watershed Plan
DESIGN GUIDELINES
Urban Design Guidelines– Mixed Use/Village Centers
Fayetteville Street Urban Design Handbook
Raleigh Downtown Urban Design Guide
OTHER REPORTS, GUIDES, STUDIES
Bus Consolidation Community Input Report
Zoning Handbook
Review of NCDOT Traffic Impact Analysis Guidelines
Right Sizing Citywide Off Street Parking Standards

This report requires the consultant team to read the existing provisions very literally. In other words, the technical review focuses on what the existing regulations actually “say” and not on how they have been interpreted or administered over time. While this approach can result in occasional misinterpretations of regulatory intent or established local traditions, such miscues provide valuable insight into provisions in need of clarification.

Finally, it is important to note that inconsistencies or weaknesses in the current regulations are in no way intended to reflect poorly on the drafters or administrators of the current regulations. The existing zoning and subdivision ordinances have not been comprehensively updated for many years, so it is to be expected that piecemeal amendments prepared by various people have resulted in both substantive and stylistic inconsistencies.

Stakeholder and Public Input

Between October 19th and 23rd, 2009, members of the consultant team held a series of stakeholder interviews and attended three public “listening sessions” facilitated by the city. Stakeholder interviews were held with people that regularly administer the existing regulations (city staff), and with people that may be affected by any

changes (attorneys, land owners, developers, builders, engineers, architects, designers).

Members of the general public were invited to participate directly in the preparation of the UDO. Public “listening sessions” were held at three different locations throughout the city.

The purpose of the “listening sessions” and stakeholder interviews was to introduce the project, and most importantly to hear comments and input about code-related issues. A wide variety of issues were discussed, concerns raised, and questions asked. Notes from these sessions were carefully reviewed—the complete results are assembled in the Appendix on page 97. During the discussions, several common themes emerged including the following:

- Clear up inconsistencies between the Comprehensive Plan and current regulations;
- Make changes to the site plan approval process, more predictable, more transparent, and more logical;
- Revisit the tree ordinance and landscape ordinance; in practice, these go against stated planning goals or contradict other sections of the regulations;

- Infill development and transitions between lower intensity neighborhoods and higher intensity mixed use areas;
- Examine parking requirements across the board; too much parking is often required for projects;
- Remove obstacles to mixed use development in growth areas designated in the Comprehensive Plan;
- Allow sustainable strategies and promote them whenever possible; and
- Provide definitions of key elements of the code and clarify definitions which are currently unclear.

Commitment to Sustainability

The 2030 Comprehensive Plan sets forth a clear commitment to sustainability. Development codes play a crucial role in realizing a sustainability. Issues such as walkability, bikeability, high quality public realms, mixture of uses, protection of natural resources, and affordable housing are all directly impacted by development regulations and their influence on the built environment. However, we have not devoted any one specific section of this document to the concept of sustainability—it is woven throughout this report, and should continue to serve as an over-arching philosophy in support of regulatory changes.

Next Steps

This diagnostic and approach report will help the city and the consultant team reach agreement on the critical elements of the UDO before beginning the drafting process. Establishing the road map early on is important because major changes in direction in the midst of the drafting process will result in wasted time, effort, and general frustration. Clear policy direction will enable the drafting process to occur efficiently and result in a better finished product.

Once this document has been finalized in consultation with the Administrative Work Group, the UDO Advisory Group, the Planning Commission, and the general public, this report will be presented to the City Council for confirmation of direction.

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2. MIXED USE PLACES

KEY ISSUES

- **Mixed Use**

New rules and districts are needed that promote walkable, vibrant, mixed use places.

- **Downtown**

Consolidate and simplify rules for the downtown.

- **Commercial Corridors**

Retrofit auto-dominated commercial corridors.

The creation of any vibrant and sustainable community is dependent on providing a variety of uses—residential, commercial, civic and office, all within walkable proximity of a diverse array of household types. Whether renting a movie, getting a carton of milk or dropping off dry cleaning, conventional developments often force residents to drive out of their neighborhood whenever they are in need of basic goods and services. Raleigh's citizens spend a lot of time in their cars. In fact, according to the to US Department of Transportation, drivers in Raleigh spend approximately 32% more time in their cars than the national average.

If Raleigh is serious about its commitment to sustainability, then the city must think about ways to get people out of their cars and into more active forms of transportation such as walking, biking and public transit. One way to do this is to re-think the built environment and transform rules that result in the building of auto-dominated, single use areas into rules that promote and encourage walkable mixed use places reflective of Raleigh's community vision.

Mixed use comes in many forms, it may be in the form of a corner store in the neighborhood, or in the form of

a neighborhood work center for people who sometimes telecommute during the week, or in the form of a vertically mixed use building with restaurants or retail on the ground floor and residential units above.

In Raleigh, mixed use may occur in a variety of forms and intensities. Raleigh's downtown will likely see the most intense, urban type of development, while other areas may take the form of mid-rise developments around some of the outlying designated growth centers. Additionally, the UDO must account for established auto-dominated commercial corridors and provide clear site development standards that enhance the overall quality of development.

Regulating Mixed Use

Conventional zoning is fundamentally about keeping things apart, but in order to create healthy neighborhoods, towns and cities, zoning must work to integrate different aspects of daily life. If a community were to approach mixed use by simply permitting a broad range of uses from single-family to light industrial in a zoning district without any sort of additional regulation, then the odds of getting a high-quality walkable, mixed use place would be slim. In a vibrant, mixed use area, buildings



TWO EXAMPLES OF VERTICALLY MIXED USE, WALKABLE DEVELOPMENT, GROUND STORY SHOPFRONTS WITH RESIDENTIAL OR OFFICE ABOVE AT VARIOUS INTENSITIES. BERKELEY, (BOTTOM), CHICAGO (TOP).

are pulled up to the street, ground floor windows are transparent, parking is structured or to the rear of buildings, sidewalks are wide, and streets are narrow. These fundamental design elements are what contribute to the sense of place and the charm of a mixed use, walkable environment.

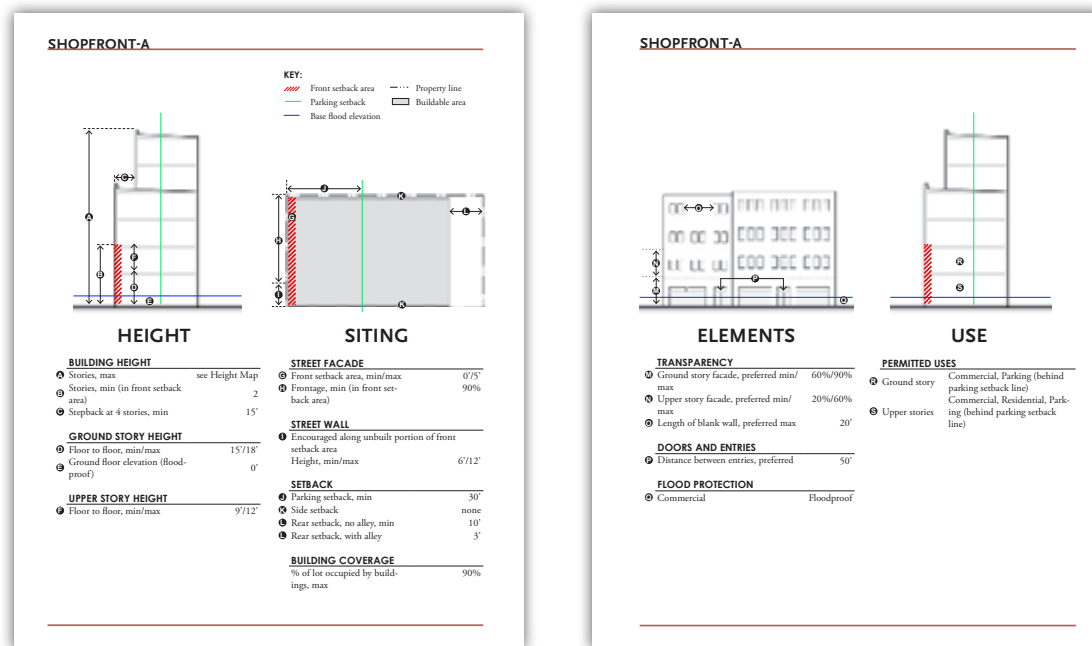
Form-Based Coding

Form-based coding is an innovative regulatory tool that can provide order to the creation of mixed use places. Form-based codes place the primary emphasis not on use, but on the physical form of the built environment with the end goal of producing a particular or specific type of “place”—whether it is big city or small town, a main street or a neighborhood.

The principle of form-based coding is that physical design is more important than use. Simple and clear graphic prescriptions for height, siting, building elements, and use are applied to control future development. More specifically, form-based coding regulates things that directly affect the way a building and street function to encourage pedestrian activity and mixing of uses. The focus is placed on building mass, building placement on lots, the form and creation of streets and other public

spaces, building heights, transparency of windows and doors, and location of entrances. With proper urban form, a greater integration of building uses can become natural and comfortable. Land use is not ignored, but more loosely regulated using broad parameters that can respond to market economics, while also prohibiting socially or environmentally undesirable uses. In short, this approach to zoning has become an effective way to

translate desired outcomes into regulatory language that helps create the physical place envisioned by a community. While we anticipate incorporating form-based elements in the UDO, we do not anticipate the final code being anything close to a citywide form-based code. Form-based code application will be most appropriate in the city’s designated Growth Centers and Corridors. For additional discussion on form-based coding see page 86.



FORM-BASED CODING IS AN INNOVATIVE REGULATORY TOOL THAT CAN PROVIDE ORDER TO THE CREATION OF MIXED USE PLACES. SIMPLE AND CLEAR GRAPHIC PRESCRIPTIONS ARE USED TO CONTROL FUTURE DEVELOPMENT.



WHILE THE MAJORITY OF THE OFFICE AND COMMERCIAL DISTRICTS PERMIT BOTH COMMERCIAL AND RESIDENTIAL USES THEY ARE SILENT AS TO STANDARDS REGULATING THE DESIGN AND ARRANGEMENT OF SUCH USES. IMAGE IS AN EXAMPLE OF MIXED USE RETAIL IN GREENVILLE, SC.

Current Mixed Use Regulations

While the current regulations fail to specify any meaningful details about the design of mixed use areas, the Transit-Oriented Development Overlay District does contain basic standards for mixed use building design. The problem with this overlay district is two-fold: 1) it fails to address vertically mixed use developments; and 2) it is not currently mapped anywhere in the city.

The Urban Design Guidelines for Mixed Use Neighborhood and Village Centers contains substantial guidance

with regard to mixed use development. Written originally to guide rezoning petitions in activity centers, the Urban Design Guidelines have also been used in an advisory capacity for site plan review. The overriding problem with the Urban Design Guidelines is that they are advisory and are not mandatory. To the extent feasible, the UDO must incorporate the most relevant rules of the Urban Design Guidelines.

A bright point in the current regulations is that in most of the office and commercial districts, there are no stan-

dards that expressly prohibit mixed use. While the majority of the office and commercial districts permit both commercial and residential they are silent as to standards regulating the design and arrangement of such uses. One impediment to encouraging mixed use is the availability of office and commercially-zoned land that serves as a discouragement to efficiency and compactness. Another impediment to mixed use in the current regulations are the transitional protective yard requirements that force potentially compatible uses to buffer and separate from one another. Many buffers are so large that they discourage pedestrian connectivity between compatible uses.

In addition to ensuring residential uses are appropriately allowed in commercial areas, some thought should be given to permitting neighborhood-serving retail in certain residential districts subject to performance standards to minimize the perceived negative impacts of such uses (see also “Keep the Corner Store” on page 32). None of the residential districts currently permit commercial activity of any size or scale, even as a special use. Only the Residential Business District allows commercial activity in a residential district, but the instances of this district are restricted to three older areas inside the beltline. Included in this discussion should be consideration of live-work and home occupations in residential areas (see also “Home Occupations” on page 53).



Downtown

Raleigh's downtown has seen a resurgence in recent years. It is the region's cultural anchor and employment hub for more than 37,000 workers. As a regional economic engine, downtown has grown into the town center of the triangle area. As an historic downtown with urban densities, mixed use is in its bones. It was developed before the automobile and as such was designed with the pedestrian in mind and not the car.

As with any good mixed use area, downtown follows the basic design rules of pedestrian-focused urbanism. Build-

ings are pulled up to the street, ground floor windows, wide sidewalks, narrow streets, structured and on-street parking are all found in downtown. These fundamental design elements are what contribute to the overall walkability of the area. The Comprehensive Plan sets forth a vision for downtown and identifies several action items that are not addressed in the current regulations.

Land Use

The current system for regulating land use and site development in downtown is a mess and the Comprehensive Plan acknowledges this. Action item DT 1.1, calls for the UDO to replace the mish-mash of base and overlay zoning districts with a cohesive set of rules developed specifically for downtown. The current regulations create a system of multiple base districts, each with a set of permitted uses and site dimensional standards. These base districts are then further regulated through the application of at least one if not two overlay districts each with additional and sometime conflicting regulations. In short, the rules regulating how downtown grows are intimidating and are likely counterproductive to the future of the city's center.



THE UNIFIED DEVELOPMENT ORDINANCE SHOULD RESPECT AND RESPOND TO THE VARIOUS CHARACTER AREAS OF DOWNTOWN.

Context

The Comprehensive Plan envisions a future for downtown that builds on its pedestrian-oriented, mixed use heritage. New developments that convey a sense of human scale and enliven the street should be required. Few form standards exist in the current regulations that would accomplish these objectives.

Overall, the downtown element of the Comprehensive Plan reflects principles that are considered best practices in planning today. The challenge is how to apply these principles in ways that respond to the varying development patterns that make up downtown. Some portions of downtown attract higher levels of pedestrian activity, other portions require or deserve more intensity and other areas might need to accommodate a different set of ground-floor uses. The Comprehensive Plan suggests some ways in which variations in these principles could be geographically applied to different areas within downtown. The Comprehensive Plan defines a tiered system that maps priority pedestrian and green streets and priority retail streets. Priority pedestrian streets are streets identified for specific pedestrian enhancements as part of a downtown capital improvements strategy. Green streets are streets targeted for incorporation of



THE COMPREHENSIVE PLAN ENVISIONS A FUTURE FOR DOWNTOWN THAT BUILDS ON ITS PEDESTRIAN-ORIENTED, MIXED USE HERITAGE.

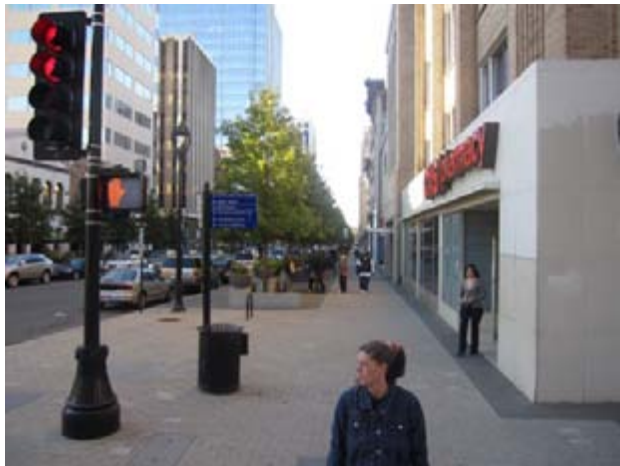
sustainable technologies such as innovative stormwater management facilities (porous pavers, tree boxes and rain gardens). Priority retail streets are streets intended to accommodate retail activity. Retail streets must have at least 60% of the block frontage dedicated to ground-floor space designed and constructed to accommodate retail uses. The problem is that the current regulations lack the appropriate tools for regulating downtown development from the both the public realm perspective (streets and sidewalks), and the private property perspective (land use and building form). A form-based approach, one which attempts to regulate both private property and the public realm, may be an appropriate solution to addressing



the complexities of attracting the right type and form of development downtown.

Streets and Sidewalks

Streets and sidewalks serve as the circulatory system for moving people and cars in and around downtown. As such, they must be appropriately scaled to handle the pedestrian and vehicular traffic without being over-engineered to the point of eliminating the intimacy of downtown. While the width of most downtown streets has been established, the area between the building façade and the curb is subject to change and should be considered in the UDO.



THE UDO MUST SEEK TO DEVELOP DOWNTOWN STREET AND SIDEWALK STANDARDS THAT EMBRACE THE PRINCIPLES SET FORTH IN THE COMPREHENSIVE PLAN, WHILE ALSO RECOGNIZING ESTABLISHED CONTEXT.

The width of downtown sidewalks has been a major topic of discussion for some time now. The UDO must seek to develop downtown street and sidewalk standards that embrace the principles set forth in the Comprehensive Plan, while also recognizing established context. The current regulations require that all downtown sidewalks must be at least 14 feet in width. To ensure a more fine-grained approach, we recommend an analysis of existing downtown streets to determine sidewalk width based on a more contextual approach, one that takes into consideration such things as adjacent land use, form and intensity of existing or proposed development, width of existing sidewalk, and level of foot, bicycle and automobile traffic. Following this level of analysis, controls on appropriate sidewalk width in the downtown can be incorporated in the UDO.

Linking Density to Public Benefits

The Comprehensive Plan suggests that high density development downtown should include public realm improvements such as publicly-accessible open space, public art, seating areas and water features that comple-

ment the building and its nearby uses. The current regulations provide an incentive-based system where additional density is allowed through the inclusion of “public amenities.”

For a bonus density system to be effective, permitted base intensities must be artificially reduced below market demand in order to ensure there is an economic incentive to acquire additional density and therefore achieve the desired public amenities.

In order for an incentive system to work effectively, the quantity and type of public amenities should be carefully considered to ensure the right balance of trade-offs.

Ongoing management is required to monitor the city’s needs over time. The city should also be careful that the “public amenity” requirements do not overburden the developer. An excessive burden, real or perceived, could cause developers to build within base entitlements, or simply build in other areas where requirements are not as stringent.

Other City Growth Centers

In addition to downtown, the Comprehensive Plan calls for the need for additional mixed use areas. As previously noted, the current regulations do not expressly prohibit mixed use, but they do not do a good job at providing guidance on how to arrange building, uses and streets in such a manner as to support a vibrant, mixed use area.

In most cases, the easiest way to build a mixed use project outside of downtown is through the planned development process. If Raleigh is serious about promoting mixed use, then the ability to build a mixed use project should be by right with adequate standards addressing good urban form. To do this most effectively, Raleigh must consider a new set of mixed use districts to strategically replace some or all of the existing office and commercial districts, perhaps even supplementing some of the higher intensity residential districts. The starting point would be developing a set of districts that implement the mixed use categories of the future land use plan (Neighborhood, Community and Regional Mixed Use).

Contextually, Raleigh is a diverse city; as such, no single mixed use district will work in all cases. In certain instances, such as in close proximity to a current or future tran-



NORTH HILLS (LEFT) AND BRIER CREEK (RIGHT) ARE CITY GROWTH CENTERS DESIGNATED AS FUTURE MIXED USE CENTERS.

sit facility, a more intense development pattern may be desired that would permit taller buildings. In other cases, such as the redevelopment of a suburban commercial strip center, a lower level of intensity may be desired due to the shallowness of the lots or the proximity to established residential areas.

The Comprehensive Plan also expresses the need for an arts and entertainment overlay that specifically accommodates visual or performing arts venues, and encourages artists to locate their studios in the area. The current regulations are riddled with overlay districts. From a best

practice perspective, Raleigh would be better served by creating an appropriate mixed use base district designed specifically to meet the diverse needs of the artist community (see also “Arts & Entertainment Overlay” on page 54).

Retrofitting Commercial Corridors

Throughout history, cities have reinvented themselves, building the new on top of the old. In striving to be truly sustainable, modern cities must continue this trend—concentrating on growing in, not out. Much of the development that has occurred in the past 60 years



HILLSBOROUGH STREET IS A GOOD EXAMPLE OF A COMMERCIAL CORRIDOR THAT PULLS BUILDINGS UP TO THE STREET AND ADDRESSES THE STREET EDGE WITH ACTIVE USES.

has been greenfield (raw land) development, producing the suburbs in response to the troops returning from World War II and the housing demands of the baby boom generation. These suburbs served as the first phase of development in many expanding American cities.

As trends shift toward a desire for more walkable urbanism, older single use and auto-dominated commercial corridors are being retrofitted into more pedestrian focused, mixed use developments. Former strip malls

with a large surface parking lots are being lined with buildings pulled up to the street, converting these under-valued strip malls into viable mixed use, main street type developments, while older commercial nodes are being re-conceived as walkable town centers. Raleigh's current regulations do not prevent the redevelopment of these older commercial areas, but the current regulations provide little guidance and fail to encourage the appropriate rehabilitation and reuse.

Parking Along the Street Edge

Active ground floor uses should be brought up to the street and on-site surface parking along the street edge should be limited. Locating parking in front of buildings increases the cross-street distance between buildings and isolates pedestrians, creating an unattractive and possibly unsafe walking environment. Parking setbacks help ensure that cars are tucked behind active street fronts. A parking setback acts just like a building setback, but instead of requiring buildings to be located behind a specific line it requires parking spaces to be located behind a given line, perhaps 25 to 30 feet behind the property line.

Buildings Pulled Up to the Street

Moving surface parking back off the street edge is often not enough to foster an active, mixed use environment. In order to facilitate such a setting, it is important that buildings line the street and sidewalk to the maximum extent possible. Reduced front setbacks (or build-to lines) of limited depth help ensure a consistent street wall. A build-to line runs parallel to the front property line, along which a building must be located. It typically establishes the maximum distance away from the property line that the front building façade may be located. The current

base districts do not establish a required build-to line. This means that significant portions of any commercial lot could contain surface parking between buildings and street. The UDO should establish a build-to line in proposed mixed use areas to ensure buildings are pulled up to the street.

Active Elements

Blank building facades tend to be monotonous, even intimidating. Large storefront windows enable interaction between pedestrians and ground story spaces and reinforce a human scale for the street. Functioning entrances generate activity at street level. Wide sidewalks and street trees provide added comfort to facilitate pedestrian activity. The addition of on-street parking can provide local businesses with convenient access to custom parking. When requiring buildings to be pulled up to the street, it is especially important to ensure that retail buildings have adequate access to convenient, on-street parking.

Liner Buildings

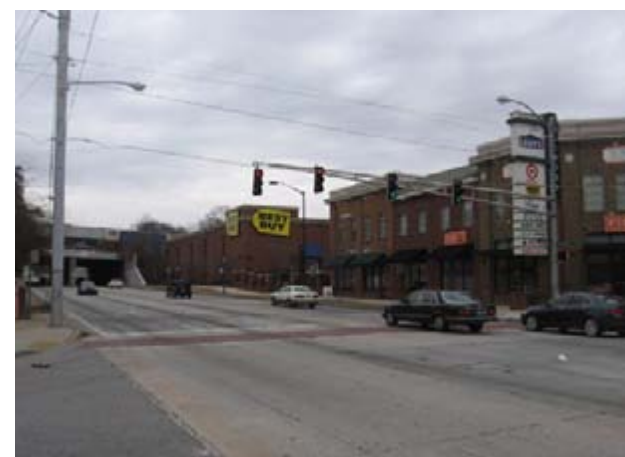
The impact of an 80,000+ square foot single use “big box” on a community is significant. Its presence increases impervious cover, stormwater run-off, traffic, clutter associated with outdoor storage and display, and general concerns of an overwhelming appearance. There are, however, standards that will help to mitigate these negative impacts. Raleigh currently has standards that

require landscape buffers along the street edge on certain roadways. These landscape buffers help with the appearance of unsightly commercial development from public rights-of-way, but are counterproductive to improving walkable urbanism.

An alternative to landscape buffers, is the use of liner buildings. If used appropriately, liner buildings can enhance the attractiveness of “big box” developments and improve their overall presence. Liner buildings are small, narrow retail shops placed adjacent to the sidewalk on the periphery of large parking lots to create a walkable street edge. Liner buildings address the inherent ugliness of the typical “big box” by screening the parking lot, improving the appearance and encouraging pedestrian activity. The buildings often contain two primary entrances, one for pedestrian access facing the street and one for vehicular access facing the parking lot. Liner buildings eliminate very few needed parking spaces, and theoretically increase income due to additional leasable space. In the best examples, liner buildings contain second or third story office or residential uses which can help in the reduction of vehicular trips.

Multi-Way Boulevards

Protecting the pedestrian from the large volume of traffic on commercial corridors requires either internal orientation of the project along a “main street,” or the inclusion of an access lane along the commercial corridor. An in-



EDGEWOOD RETAIL DISTRICT, ATLANTA. LINER BUILDINGS SCREEN “BIG BOX” DEVELOPMENT.

ternal “main street” does little to enliven the surrounding area. However, a one-way access lane separated from the travel lanes of the major road by a landscaped median (wide enough for planting street trees) creates a main street environment through a combination of parking with at least one through lane—a multi-way boulevard. The access lane of the multi-way boulevard becomes the



MULTI-WAY BOULEVARD, OCTAVIA BOULEVARD, SAN FRANCISCO, CALIFORNIA.



MULTI-WAY BOULEVARD, EASTERN PARKWAY, BROOKLYN, NEW YORK.

organizing element for pedestrian and streetscape improvements such as wider sidewalks and on-street parking. Models of such boulevards exist—Octavia Boulevard in San Francisco, and Eastern Parkway in Brooklyn, are two such examples.

Site Development Standards

With the development or re-development of any large scale commercial or mixed-use project there will be certain impacts that must be addressed in the code. Issues such as stormwater runoff, outdoor storage and display and site lighting should all be controlled to reduce their

impact on surrounding uses and to provide for a more attractive pedestrian experience.

The current regulations lack the tools to address the complexities of site development in large-scale projects. However, the regulations do provide for the unity of development by addressing certain physical characteristics (signs, building materials and colors) to ensure consistency in large-scale shopping centers.

The existing standards do not sufficiently control the location and appearance of outdoor storage and display. Outdoor display refers the outdoor display of products actively available for sale. All outdoor display should be removed and placed inside a fully-enclosed building at the end of each business day. The outdoor location of soft drink or similar vending machines should also be considered outdoor display. Outdoor display should be permitted in most nonresidential districts provided certain restrictions are enforced. Outdoor display should only be allowed adjacent to the primary façade of a building, and should be limited in its total extent.

One common approach to regulating outdoor storage is to establish two categories: limited outdoor storage and general outdoor storage. Limited outdoor storage includes such things merchandise or material in boxes, in crates, on pallets, shopping carts, garden supplies, building supplies, garden sheds. General outdoor stor-

age includes more intense things such as salvage yards, vehicle storage yards, shipping containers, lumber, pipe, steel and junk. Different standards should be developed for each category and the districts in which each category is permitted should be clearly established.

Pedestrian Business Overlay Districts

As perhaps the only set of districts that directly discuss the public realm as a place (an essential component for facilitating mixed use), the Pedestrian Business Overlay Districts establish regulatory controls that encourage walkable urbanism through the creation of a streetscape plan for a specified area.

So, while the Pedestrian Business Overlay District is intended to preserve and enhance the character of pedestrian-oriented retail districts, it contains little guidance as to how best to accomplish that task. The key requirements of a Pedestrian Business Overlay District include the following:

- Allows all uses permitted in the underlying zoning district, except vehicular display areas;
- Allows up to 320 dwelling units per acre through City Council site plan approval;

- Reduces the off-street parking requirements;
- Provides for height limits that differ from the underlying zoning district;
- Requires the planting of street trees and improvements of pedestrian space according to an adopted streetscape plan;
- Allows setbacks, signage, and pedestrian ways to be set by a streetscape plan; and
- Requires bicycle parking facilities.

While the Pedestrian Business Overlay District is a potential blank slate through which good urban design practices can occur, it contains little regulatory guidance that will ensure that best practices will be set in place within the context of each streetscape plan. As a result, streetscape plans vary widely in their scope and application. Furthermore, the current rules do not effectively address the redevelopment of existing sites. The rules are also focused on the “pedestrian street” and little if any controls are in place to address the appropriate type and form of development on side streets.

Each existing Pedestrian Business Overlay District and the associated streetscape plan should be reevaluated in light of the Comprehensive Plan and national best practices. Building setback and height requirements should



THE PEDESTRIAN BUSINESS OVERLAY DISTRICTS ESTABLISH REGULATORY CONTROLS THAT ENCOURAGE MIXED USE, WALKABLE DEVELOPMENT. GLENWOOD SOUTH (TOP), CAMERON VILLAGE (BOTTOM).

be pulled out and placed in the UDO. Design guidelines and streetscape provisions should be reevaluated and kept in the plan.

Compact Development

The compactness and general arrangement of uses contributes to long-term sustainability through the ability to service daily activities without the use of a car. In addition, centers of activity that are surrounded by higher densities are more likely to be successful since they capture a greater number of local convenience trips. This leads to a reduction in overall car trips and other negative aspects of that mode of transportation. Buildings that are vertically mixed provide a more compact building form that consumes less land both by stacking compatible uses and by sharing parking spaces. Vertically mixed use buildings also provide a variety of housing opportunities ranging from high-value condominiums to affordable units for the area's workforce. Similarly, separated uses require their own individual sets of infrastructure while also spreading out the transportation network to service those areas.

Mixed use developments often arrange the various buildings such that while the uses are segregated, they



BIRKDALE VILLAGE, HUNTERSVILLE. VERTICAL MIXING OF USES IN COMPACT BUILDINGS SURROUNDING A CENTRAL GREEN.

still provide some efficiency through shared parking and pedestrian-accessibility. These centers often work well in areas where vertical mixing of uses is challenging to make economically viable. Potential barriers to compact development in Raleigh include transitional protective yard requirements, tree save areas, required on-site open space, minimum yard setbacks, minimum lot size, maximum densities, minimum parking requirements and height specifications.

Reduce Focus on Density

Many existing areas do not allow adequate density for residential or mixed use projects to compete with non-residential development. As a result, many of Raleigh's

mixed use areas may be hampered by the city's focus on density as a regulatory measure.

One solution to this problem may be a code that focuses more heavily on form in select portions of the community. Form provides a predictable physical solution (a high quality public realm, and buildings that relate in scale to the adjacent street) to development. This approach results in less need to focus on the specific number of units in a project.

For example, downtown might offer a great opportunity for a new residential building, since adequate reserves of structured parking are generally available nearby. If each floor of the new residential building was 5,000 square

feet in area, does the community really have an interest in whether each floor contains two 2,500 square foot units (3 bedrooms), or four 1,250 square foot units (one or two bedrooms each)? When form is appropriately controlled, the focus on mechanisms such as floor area ratio and density can be reduced. Additionally, placing all the emphasis on density can encourage people to max out their building envelope with little or no thought to how the building addresses the street.

As with density, the impact of a new development can still be estimated under a form-driven model. By controlling standards such as height, lot coverage, setbacks and parking, a form-driven model still allows the city to estimate the total number of dwelling units or floor area that a given site can accommodate. In order to estimate impacts under both a density-driven model and a form-driven model, a number of assumptions will have to be made on such factors as size of units, number of bedrooms, average household size, children or no children, and traffic generation rates; however, a form-driven model provides some level of predictability regarding how the new development impacts the public realm.

Current regulations allow more height and bulk in and near the downtown area than can be used given the residential densities set in the underlying districts. Using the

Downtown Overlay District, the City Council has provided an option to increase the densities allowed through the site plan process; however, this provides no certainty to either the development community or the neighbors. A more straight-forward description of intended end results (the built form) in downtown and other City Growth Centers would help alleviate the need for the current focus on density.

While this report does not propose removing density restrictions across the board, it does propose that in certain high growth areas, an approach that focuses on form over density be considered.





3. COMMUNITIES, NOT SUBDIVISIONS

KEY ISSUES

- **Open Space**

Integrate open space into subdivision design. Allow for clustering of smaller lots in exchange for usable open space.

- **Transitions**

Engage the community to develop the right type of transitions.

- **Housing Choice**

Allow for a wider range of housing types, encourage housing choice in residential neighborhoods.

The residential subdivisions built in Raleigh over the past 20+ years follow two disparate models—large-scale master planned communities, and more traditional, by right subdivisions that maximize the number of lots created from the least amount of land. The master planned communities include significant amenities and create quality living environments. These communities were typically approved through the conditional use district zoning process, or through the planned residential development district. Both options allow the City Council to manage the end result. These larger projects are not the subject of the portion of this report.

On the other hand, many of the smaller residential subdivisions do as little as is required to protect the natural environment, encourage pedestrian opportunities, and provide parks and open space for future residents. These “cookie-cutter” subdivisions are partially the result of the way Raleigh’s currently approves subdivisions. Like a majority of communities, Raleigh’s residential districts specify a minimum lot area and minimum yard setbacks. The best way to achieve maximum density under the current regulations is to design a pattern of lots with little consideration for the natural features of the site. Unfortunately, this approach has a tendency to create monoto-

nous subdivisions which lack identity and are less likely to retain their value over the long term.

Open Space and Subdivisions

One way to improve the quality of typical suburban subdivisions is to require that open space is fully integrated into the design of the subdivision.

Properly designed and integrated open space has been shown to enhance the quality of life and add significant value to a neighborhood. The real estate market consistently demonstrates that people are willing to pay a larger amount for a property located close to open space than for a home that does not offer this amenity.

Open space can come in variety of forms. Improved open space includes such things as parks, playgrounds, sports fields and plazas. Unimproved open space is just as important and includes such things forested areas, floodplains, stream buffers, steep slopes and other typically non-buildable lands. Where appropriate, it is important to include a mix of both improved and unimproved open space in subdivision design. Access to open space and can be used as a factor in determining the appropriate level of density—with smaller lots and higher densities

ONE WAY TO IMPROVE THE QUALITY OF A SUBDIVISION IS TO REQUIRE THAT OPEN SPACE IS FULLY INTEGRATED INTO THE DEVELOPMENT.



conditioned on the provision of the appropriate allocation of parks and open space.

Other neighborhood amenities that enhance the overall quality of life for residents could be required for developments looking for increased density options. Some possible amenities to include: picnic areas; trails; dog parks; play areas; ballfields, basketball courts, skate parks; health clubs; meeting/activity rooms; swimming pools; squares and greens; natural stormwater retention; and entrance features.

Current Conditions in Raleigh

With the exception of certain areas subject to greenway dedication, there are no open space requirements for conventional subdivisions using a base zoning district. This may be due to the fact that Raleigh requires an open space impact fee of approximately \$1,000 per new single-family home. This impact fee is limited, in that it can only be used for capital facilities and not for operations and maintenance. The resulting financial structure forces the city to focus more on larger community parks, and less on smaller neighborhood parks. While the larger community parks serve an important purpose, Raleigh could find itself under-served by small walkable neighborhood parks.

IN ADDITION TO ADDING VALUE, OPEN SPACE HAS THE ABILITY TO ENHANCE THE QUALITY OF LIFE IN A NEIGHBORHOOD .



Under the current regulations, only planned residential developments, trigger open space requirements. The only standard for this open space is that it “shall be logically located and accessible to all dwellings, insofar as possible, by pedestrian ways and connecting open spaces and streets.”

It is important to note that the Transit-Oriented Development Overlay District makes other accommodations for the required open space of group housing to allow for its re-allocation as more urban space such as outdoor balconies, decks, and roof gardens. Urban open spaces are also discussed in section 3.2 of the Urban Design Guidelines for Mixed-Use Neighborhood and Village Cen-

ters. As suggested in the current regulations, and further evidenced in the Comprehensive Plan, unless Raleigh changes its approach to open space, the city may not be able to meet the demand for small neighborhood-scale open spaces.



Require Open Space

As previously noted, Raleigh now requires only planned residential developments to provide open space. This requirement should be extended to all residential subdivisions above a certain size. The type and size of required open space should vary based on the context and character of the area. For example, whether the subdivision is urban or suburban. This could help Raleigh address its need for neighborhood-scale parks. Before initiating any type of mandatory open space provision, it will be important to ensure that there is no conflict with the city's open space facility fee.

Cluster Subdivisions

A cluster subdivision is an alternative subdivision design where smaller lots are permitted in exchange for additional usable common open space. A cluster subdivision can be more attractive to developers for a number of reasons:

- The clustering of homes will allow the developer to spend less money on the internal infrastructure of the site;
- The provision of high-quality public space will result in a higher market value for lots in close proximity to the open space amenity; and
- Incentives to provide a better product than “typical” subdivision patterns.

An option to cluster and develop on smaller lots in trade for additional common open space should be allowed by-right in all low-density residential districts (RR to R-6). Enhanced standards would need to be prepared to ensure that all open space is usable and fully integrated into the design of the subdivision. To encourage cluster subdivisions, additional density could be provided for developments that choose to cluster and preserve additional open space.

Transitions

During stakeholder interviews regarding the current regulations, there was no more common topic than “transitions.” The concept of transitions is actively discussed both in Raleigh’s planning and policy documents and its development regulations. Several chapters of the Comprehensive Plan address the different aspects of transitions, and they appear in Pedestrian Business Overlay Districts and Neighborhood Conservation Overlay District plans. The city’s Appearance Commission has identified issues related to transitions in many of its annual reports, as well as individual project reviews, and the Historic Preservation Commission has made similar comments related to edges of historic districts. The Appearance Commission recommends that the range of projects that come before it for review be expanded, in the interest of promoting compatibility and best practices in urban design.

At present, most of the regulations related to transitions appear in design guidelines, which are applied during discretionary review of projects.

DURING STAKEHOLDER INTERVIEWS REGARDING THE CURRENT REGULATIONS, THERE WAS NO MORE COMMON TOPIC THAN “TRANSITIONS.”



Types of Transitions

There are a variety of types of transitions that are of concern. Some focus on contrasts in building mass and scale, often along edges of different zoning districts. Others relate to changes within a district. Issues related to transition include mass and scale, building character, service areas, outdoor lighting, emissions, noise, traffic, open space, views, privacy and solar.

Commercial to Residential

This typically occurs along corridors, where commercial development, or a form of retail or mixed use is permitted. It sometimes occurs where light industrial abuts residential. The typical site layout is a building that faces

the arterial street, with services located off a rear service drive, often abutting the residential neighborhood.

High to Lower Density Residential

This transition is related to the potential impact of larger-scale construction allowed in the higher density district. Some of the concerns focus on the building form, including its overall mass, as well as its shape.

Density within a District

In some situations, transitions occurs within a single zone district. When the existing building scale reflects an earlier, lower density, and the current zone designation permits a higher density, this transition can occur. Some identify this as a temporary phase, and argue that residents should accept the change, since the area

is intended to transition completely over time. Others suggest that some means of mitigating impacts such as building height, house size and impervious surface are still needed.

Downtown to Single-Family Neighborhoods

In this case, the change in scale can be the greatest of all development scenarios in the city. Two somewhat conflicting goals are at play: First, to promote the downtown as the highest density place in the community; and second to respect older neighborhoods that were established when the city center was more compact than it is today. The sensitivity of this transition varies in different parts of downtown, in part depending upon the character and age of the abutting neighborhood. A one size fits all solution, that does not reflect these differences in context, will not be effective.

Design Solutions

The types of transitions above represent the most obvious transition conditions in Raleigh. Others may also exist, but given the previously described range of transitions, there are several design solutions that can mitigate the conflicts.

Building Form

Abrupt changes in scale can be softened by stepping down building mass, articulating wall planes, and using roof forms that reduce the perceived scale. In recent site plan reviews, residents lobbied for pitched roofs on adjacent development as a means of reducing the perceived scale, or simply introducing a form that is more familiar to the neighborhood. At present, this discussion occurs on a case-by-case basis, and without a method to consider a range of form-related approaches that could help make compatible transitions.

While several ideas have been introduced in the course of individual project reviews, there remains a lack of basic design standards or guidelines to address the fundamental ways in which building forms relate to each other and their context. Additionally, a consistent method of describing various contexts, as a starting point for discussing compatibility is lacking. How the downtown transitions to surrounding single-family neighborhoods is likely to be different from how a commercial corridor transitions to adjacent neighborhoods.

Change in Scale of Buildings

Many of the site plan review discussions have focused on stepping down the scale of buildings along transitional edges. While this is one approach, some of the applications have been rather simplistic. The degree to which height can be tolerated, in varying proportions of a building or a project, receives less discussion. This may be in part due to a lack of visual aids to help in interpreting impacts of varying height schemes.

Building Orientation

Another design solution that may not be receiving enough attention during site plans reviews is building orientation along transitional edges. Due to its effect on solar access, air movement patterns and green space, building orientation will become more of a concern as green building design principles are considered at a neighborhood level.

Connecting vs. Buffering

A fundamental issue is the degree to which transitional edges should buffer, and even separate, abutting areas or the extent to which a positive interface, with appropriate connections, should be provided. Most of the review process, and related criteria, focuses on minimizing negative

impacts through landscaped protective yards. Current best practices in urban design focus on knitting neighborhoods together, including commercial and residential portions. The degree of connectivity may need to vary depending upon the setting and the amount of build-out that has already occurred, but there appears to be little room for this discussion in the current regulations.

Resolution of Transitions

Raleigh needs to engage the community in discussing the various types of transitions, with a view to providing standardized solutions to the extent feasible. A series of facilitated visual workshops focused on the variety of options and techniques for making successful transitions should occur in an effort to code acceptable transitions, and reduce the continual tension over these issues evident in the present system.

Planned Residential Developments

Any community as complex and diverse as Raleigh needs some degree of flexibility for innovative development.

Raleigh's current regulations contain provisions for nine different types of planned residential development. These

development types contain a myriad of standards; some unique to the planned development type while others are redundant in that they are restated for each planned development type.

The significant use of planned developments is one indicator that the current regulations are not working effectively. It may mean the base districts are not capable of allowing different types of residential developments.

Raleigh should consider eliminating the majority if not all of the planned residential districts and replacing them with a combination of base districts and a more generic

planned development approval process that would apply to a variety of residential, commercial and mixed use developments.

Any new or updated base districts should contain dimensional standards that are more appropriate to their settings. In addition, other site standards such as lighting, landscaping, parking and outdoor storage should be improved to the point that all development is treated consistently. This is often achieved by reviewing recent approvals, and mining them for the conditions that suggest Raleigh's current desired quality of development.

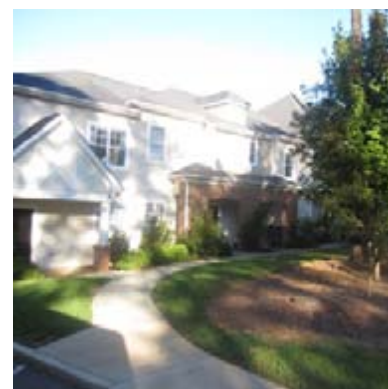
Problematic uses currently regulated using the planned residential development process should be allowed within appropriate base districts, but subject to use standards similar to those currently invoked through the planned residential development process.

A more generic planned development process would focus on ensuring a level of creativity in site planning and mixed use that is not possible in any base district. This would increase the flexibility of the UDO while ensuring that any approved planned development is of the highest quality.



NEW TOWN, MISSOURI (SOMETIMES CALLED NEW TOWN AT ST. CHARLES) IS A PLANNED COMMUNITY DEVELOPED IN UNINCORPORATED SAINT CHARLES COUNTY, MISSOURI.

THE CURRENT BASE RESIDENTIAL DISTRICTS DO NOT EASILY ALLOW OR ENCOURAGE A MIX OF HOUSING TYPES WITHIN THE SAME DEVELOPMENT OR SUBDIVISION.



Diversity, Affordability, Choice

Great neighborhoods are the building blocks of great communities. One of the characteristics of a great community is representation of a variety of people—young, old, rich, and poor.

Life-Cycle Housing

One way to achieve diversity in age among neighbors is to pursue the planning principle of “life-cycle” housing. Life-cycle housing is defined as the opportunity to provide a person’s housing needs for their entire lifetime within

a single neighborhood or area. The concept implies that mixed neighborhoods containing starter homes, larger homes for families, apartments, townhouses for the retiree population, and assisted living facilities for the elderly should all be located in relatively close proximity so that one’s entire lifetime could be spent within a single neighborhood.

Affordable Housing

The Comprehensive Plan discusses a variety of affordable housing options. One option discussed suggests the city investigate an inclusionary zoning policy that either require or incentivize that a given share of new residential construction be affordable to people with low to moderate incomes. Inclusionary zoning is becoming a common tool to help provide a wider range of housing

options than the market provides on its own. The mix of “affordable” housing and “market-rate” housing in the same neighborhood or development is seen as beneficial by many. While many jurisdictions require inclusionary zoning, many more offer density or height bonuses, expedited permits, reduced fees, cash subsidies, or other incentives for developers who voluntarily build affordable housing. It is important to note, there is no express legal authority in North Carolina that allows inclusionary zoning. A mandatory program of this nature would require special enabling legislation from the General Assembly.

Housing Choice and Variety

The current base residential districts do not easily allow or encourage a mix of housing types within the same development or subdivision. Where a developer wants to



build a development with multiple housing types ranging from apartments, townhouses, and duplexes to conventional homes, they can not easily do so within the same base residential district due to over burdensome conditional use spacing requirements. By adding a variety of defined housing types such as semi-attached, duplexes, tandems houses, townhouses and other attached single-family housing types to existing residential districts where appropriate and with performance standards would help increase housing diversity and affordability in new and existing neighborhoods. While some of these housing types are not expressly prohibited, they should be defined and standards put in place to ensure choice in housing is available for both developers and future residents.

Accessory Dwelling Units

Communities around the country are using accessory dwelling units (granny flats, carriage houses, alley flats, garage apartments) as a way to help provide for housing diversity, affordable housing, and increased density in new and existing neighborhoods. Accessory units often serve as an opportunity for owners of larger homes to acquire income for upkeep of the principal structure. They also provide smaller, affordable units for elderly residents and young adults. The current regulations allow attached accessory dwelling units (utility apartments) by right, subject to conditional use standards, in all residential districts. This is a very progressive approach. The city should consider expanding this approach and allow detached accessory structures, subject to conditional use

standards that control its placement and height on the lot, in all residential districts. We would also recommend changing the current size limitations ($\frac{1}{4}$ the size of the principal structure) so that regardless of the size of the principal structure the accessory unit could be at least 450 square feet.

It may be more tolerable to allow detached accessory units in all new subdivisions; however, some older portions of the community may be ready to encourage this housing option.

Keep the Corner Store

Another essential component to creating a great neighborhood is to allow limited neighborhood-serving commercial uses within a residential district. It is precisely these uses that make the residential areas of some of our most loved places so special. There is nothing inherently wrong with a small art gallery, coffee shop, specialty food store, or small-scale corner store (without gasoline sales) from being located in a residential district, provided the use complies with certain performance standards so it does not negatively impact the neighborhood.

Currently, Raleigh permits certain residential-related services as conditional uses, provided they are internal, in planned residential developments. Hiding such uses internally essentially prevents these uses from contributing to the greater community. The city should consider allowing limited neighborhood-serving commercial uses all residential districts by right, subject to a series of performance standards, in all new subdivisions. In existing built-up areas, limited neighborhood-serving uses could be permitted as a special use provided the use meets certain performance standards such as being located on corner lots only.





4. RESOURCE PROTECTION

KEY ISSUES

- **Tree Protection**

Protect trees, balance with the need for walkable urbanism.

- **Stormwater**

Manage stormwater as close to the source as possible. Promote innovative solutions such as green roofs, rain gardens, porous pavers bioswales and riparian buffers.

RALEIGH HAS A LONG HISTORY OF MANAGING AND RE-PLANTING TREES.



Tree Protection

While Raleigh offers a substantial amount of rhetoric surrounding the protection of trees, the current regulations do not, in fact, protect many trees. Further, the current regulations are not focused on the quality of trees protected, or on the successful integration of trees into development.

Part of the reason for this may be Raleigh's limited authority to regulate the protection of trees. Clearing sites under the guise of "silviculture" (tree farming) is protected under state law in North Carolina. There is

clear authority to protect a nominal buffer along the edge of a property to be clear-cut, based on a special act of the state legislature. However, it is less clear whether or not additional authority to protect trees is available when development is allowed by right. Many communities surrounding Raleigh, including Durham, Knightdale and Garner all include provisions protecting trees in addition to perimeter buffers.

Conditional use district zoning and special permit approvals provide the opportunity to save trees through the establishment of approval conditions.

Tree Conservation Areas

Raleigh currently requires tree conservation areas for all subdivisions and site plans over two acres in size (and even on some smaller nonresidential sites). The basic requirement is first applied to primary tree save areas.

Primary tree save areas on a site include:

- Resource management areas (adopted as part of conditional use zoning);
- Areas with "champion" trees;
- Riparian buffers; and
- Floodplain areas with 45-degree slopes.

If tree conservation in these areas does not equal ten percent or more of the site area, then secondary tree save areas are considered. Secondary tree save areas focus first on thoroughfares and then on perimeter yards. In both cases, the quality of trees saved or protected is not the key factor in determining appropriate portions of the site to be set aside for the protection of trees. Finally, the regulations allow for a payment in lieu to be made as an alternate means of compliance, which does not save any trees on the site.

Recent proposed changes to the regulations for Tree Conservation Areas help ensure replanting of trees in primary



tree conservation areas and in perimeter buffers. These provisions will enhance existing areas, but do not require any additional protection. Raleigh should also consider eliminating the exception for sites under two acres—especially in greenfield settings.

Alternative Tree Protection Models

Durham, Knightdale, Garner, Carrboro, Pittsboro, Winston-Salem, Greensboro, Boone, Asheboro, Greenville, Asheville and Charlotte all protect trees in some fashion. Many apply a canopy cover or tree cover concept, focused on percent coverage of the overall site. Even these approaches may not save the most significant trees on the site.



Tree Preservation Incentive

A variety of tree preservation incentives are offered in the current regulations including:

- Reduction of protective yards;
- Reduction of tree spacing required in parking areas;
- Elimination of shrubs; and
- Reduction in landscaped area required for vehicular surface areas.

While these incentives appear reasonable (if awkwardly drafted), as land costs rise, they are less likely to be implemented. In addition, again, there is no focus on the quality of trees protected.

Protecting Large Trees

Raleigh currently protects very large trees by defining a champion tree, linked to a specific list of tree species and sizes that are protected. Champion trees are quite rare. Many communities extend the same types of protection afforded to champion trees to another, smaller set of trees, commonly designated as “heritage” trees. If, for example, a champion Oak tree was 36 inches in diameter, a heritage tree of the same species might be 24 inches in diameter.

Protecting High Quality Trees

Nothing about Raleigh’s current system requires the protection of quality areas of trees on a site, unless conditional use district zoning, a special use or other discretionary approval allows the establishment of conditions of approval.

Mechanisms for protecting either high quality or large trees in Raleigh will require further discussion with the City Attorney, and may require additional legislation.



RALEIGH HAS A CONFLICT BETWEEN THE DESIRE TO MAINTAIN DEEP, WOODED BUFFERS ALONG THOROUGHFARES AND THE GROWING DESIRE TO CREATE WALKABLE, URBAN PLACES.

Balancing Trees and Urbanism

In order to create walkable urbanism, there are often some important trade-offs that occur. First and foremost, the primacy of the public realm should be given to the pedestrian and the buildings that enliven the pedestrian experience. Most trees in walkable urban environments are placed there as part of an intentional urban design plan. Urban street trees are carefully selected for the harsh conditions that they must survive. They should

also be carefully placed so as not to obscure storefronts, while still providing a welcome canopy for pedestrians. In short, street trees should complement the urbanism of any great place. At present, Raleigh has a conflict between the desire to maintain deep, wooded buffers along thoroughfares and the growing desire to create more walkable, urban places for people. In a city that has long revered its trees, it comes as no surprise that there is a priority placed on tree preservation. The current street yard protective requirements require trees to be saved or

planted in a landscaped area adjacent to the street right-of-way. The UDO will incorporate these requirements into a variety of streetscape standards that could be contextually linked by zoning districts or street type to ensure tree lined streets continue to thrive throughout the city.

Highway Buffers

The Special Highway Overlay Districts (SHODs) are intended to protect and preserve the natural scenic beauty along designated major access corridors and specified principal arterials. These districts begin with the assumption that through maintaining the attractiveness of these roadway corridors with deeper buffers and setbacks, the economic value of the entire community will be enhanced. The districts assume that everything built along the road frontage will be ugly (or at least have the possibility of a negative aesthetic), and therefore mandate a tree and landscaping buffer that ranges from 25 to 50 feet depending on the fronting thoroughfare designation.

This expansive front yard is by its very nature contrary to a good urban environment. Retail, in order to be successful, needs visibility regardless of whether it is auto-oriented or pedestrian-oriented. Where the desire is to create a viable pedestrian experience, a continuous line of active facades and storefronts will encourage pedestrian activity more effectively than any other urban design technique.



This is not to suggest that all of the tree buffers along roads are inappropriate. Only in areas where there is an expressed desire to create walkable centers of activity is there a need to rethink this approach. This approach should also go hand-in-hand with a reconfiguration of the roadway itself, wherever possible.

Buffers should not be used to overcome what is assumed to be bad architecture. By setting some basic design standards for building design in the UDO, the community can be assured that the urban form will return as much or more value than a simple, isolated stand of trees. The city should establish building design and streetscape standards to ensure a high quality pedestrian realm and corridor aesthetic in designated City Growth Centers and multi-modal and urban corridors. The SHOD concept should be continued on designated Parkways.

Measurement of Trees

No matter what kinds of trees are regulated in the UDO, a consistent approach to measurement of trees should be applied. Various parts of the existing regulations measure trees in caliper (near the ground) in diameter at breast height (4½ feet above the ground), and in circumference (around the entire tree). Normally, trees in the field are measured in diameter at breast height, while trees for planting purposes may be measured in caliper inches.

Stormwater

The effect of development and human activity on the quality of rivers, streams, and lakes around Raleigh is well documented. Pollution and the potential for pollution is a serious threat to all water resources in the region and is an issue of specific importance to urbanized areas like Raleigh.

One of the largest contributors to water pollution is non-point source pollution. Non-point source pollution includes stormwater runoff carrying pollutant particles from a variety of locations including construction sites, parking lots and rooftops into streams, rivers and lakes. Factors that affect stormwater runoff are generally development-related. With an increase in development, there is an increase in the amount of impervious surface

area—those areas such as pavement or roofing which do not allow for filtration of stormwater. These impervious surfaces cause unfiltered stormwater to drain more directly into streams and rivers, without substantial filtering through the natural landscape, thus increasing overall levels of pollution.

Regulatory Structure

The State of North Carolina adopted a comprehensive strategy for the control of total nitrogen in stormwater runoff for new developments when it adopted the Neuse River Basin Nutrient Management Strategy. The goal of the strategy is to achieve a 30 percent nitrogen reduction from each controllable and quantifiable source of nitrogen in the basin. These sources are: wastewater treatment, urban stormwater, agriculture and nutrient application. The Neuse strategy includes a rule to protect riparian buffers in order to maintain their existing nitrogen removal capabilities. The strategy also includes the control of peak runoff to pre-development rates for the purpose of protecting streams and the nutrient reduction functions of riparian buffers from accelerated erosion.

Stormwater and water quality are regulated by both the federal government through the Clean Water Act and the NC Department of Natural Resources-Division of Water

Quality through the enforcement of the Neuse River buffer standards.

The guidance that is being provided by both agencies, at least through their model ordinances and design guidelines, is a “one size fits all” approach that paints with a broad brush across the community regardless of the context or of other priorities, particularly those that attempt to create great urban spaces. As a result, Raleigh’s adopted ordinance and design guidelines mimic this uniform approach. No consideration is given to redevelopment areas or areas that are designated as centers of activity. Existing development is not required to meet the standards until further subdivision, development or redevelopment of those properties occurs.

Impact of Existing Approach

The application of a universal standard may be counterproductive to the other priorities of the Comprehensive Plan. For example, in areas where the city wants to direct and encourage development activity (such as downtown and mixed-use centers), different standards for impervious surface ratios and similar factors are appropriate. Perhaps available stormwater quality and quantity solu-



tions, like many other standards, should be matched to the various development contexts in the city.

This especially applies to nitrogen reduction, which often requires a highly engineered solution. As noted in the Stormwater Manual, “based on national and regional studies, most BMPs are capable of removing only 20 to 40 percent of total nitrogen on a consistent basis. All

BMPs require regular maintenance and some have varying performance depending on soil type and the season.”

The current regulations provide for a payment in lieu of compliance with the nitrogen reduction standards into the NC Riparian Buffer Restoration Fund. However, currently impervious sites (redevelopment areas) are required to come into full compliance with this nitrogen

standard—creating an uneven playing field which favors greenfield sites. In order to meet the remaining stormwater standards, since the pre-development standard is already urbanized, additional controls would not need to be installed.

One key to thinking about stormwater management is to consider the character of the varying areas—suburban areas should apply solutions that mimic natural systems (no concrete tanks), while urban places should focus on solutions such as green roofs, and above-ground stormwater infrastructure in street rights-of-way and parking areas. Overall, the intent should be to manage stormwater quality and quantity as close to the source as possible.

Riparian (Watercourse) Buffers

The Raleigh Stormwater Control and Watercourse Buffer Manual contains riparian buffers that must be incorporated into new development. The Neuse Buffer Rule requires a mandatory 50-foot setback from intermittent and perennial streams, lakes and ponds. Wherever possible, standards applying to the layout and design of development should be incorporated in the UDO.

Steep Slopes

Development on steep slopes can substantial soil erosion. Raleigh's current regulations do not contain controls on development on steep slopes (over 15 percent, for example). Many communities consider such steep slopes as undevelopable. Although there are technically feasible approaches to development in such settings, these should be the exception. The city should consider banning development on steep slopes except where absolutely necessary.

Resource Extraction

Raleigh currently allows mining and quarrying in the I-1 and I-2 districts by right. No additional standards are applied during development review, although the state does require appropriate permits. The city should consider whether or not additional controls on mining, quarrying and other resource extraction are appropriate—specifically whether special use permit mechanism (with its required public hearing) should be employed to approve resource extraction activities.



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5. TRANSPORTATION AND MOBILITY

KEY ISSUES

- **Walkability**
Improve street layout, reduce design speeds, add pedestrian-friendly features.
- **Complete Streets**
Encourage bike lanes, bikeways, and bike parking.
- **Connectivity**
Ensure adequate connections between developments. Improve block length and block perimeter standards.
- **Right Size Parking**
Update parking ratios, add parking credits and shared parking plans.

The statistics speak loudly. The Raleigh urban area is considered one of the ten most dangerous urban areas for walking in the country based on the number injuries and deaths per capita. In North Carolina, 29% of the population are considered obese and the rates for childhood obesity are on the rise. Cardio-vascular and pulmonary diseases are two of the leading causes of death in the United States. The common denominator of all of these issues is that a statistically significant percentage can be prevented through basic exercise—walking, running, or bicycling.

Approximately one in four trips from the home are made to destinations that are less than one mile away, but nearly 80% of these trips are made by automobile. In addition, the ability of someone to avoid a car trip because they can walk or have a non-motorized alternative can yield significant energy saving along with a commensurate reduction in air polluting emissions. This is underscored by the fact that the average Vehicle Miles Traveled (VMT) in the Raleigh MSA is 32 miles per day, nearly 29% higher than the current national average of 25 miles per day. When accounting for fuel and maintenance, each VMT can cost about 50 cents per mile. When this differ-

ence is multiplied across an entire city of both current and future population, the wasted dollars, not to mention the time lost sitting in traffic, are staggering.

When these issues are combined, they form a convincing argument for improving Raleigh's overall transportation network and associated facilities, a network that accommodates bicycles, pedestrians and mass transit as well as automobiles. Given the immediacy of the issues presented, this is perhaps the most important and most fundamental challenges facing all cities, Raleigh included, as they continue to both expand and redevelop their urban and suburban areas.

Streets

Streets are the most important and most dominant form of public space in a city. Currently, Raleigh regulates street design through a separate manual, the Streets, Sidewalks, and Driveway Access Handbook. This regulatory Handbook controls the design criteria and standards for streets, curb radii, sidewalks, clear sight and access. To enhance the link between transportation and land use, the standards in the Handbook should be incorporated into the UDO.



STREETS ARE THE MOST IMPORTANT AND MOST DOMINANT FORMS OF PUBLIC SPACE IN A CITY. THE EXAMPLE ABOVE COMES FROM ASHEVILLE, NC.



THE COMPREHENSIVE PLAN CALLS FOR REVISED STREET CROSS-SECTIONS TO INCLUDE ENHANCED SIDEWALKS AND BICYCLE LANES.

Understanding Context and Streets

Context-sensitive street design looks to local conditions to determine the best possible street design that optimizes mobility and safety for all modes of travel, while preserving or enhancing community character. It contrasts greatly with a “one-size-fits-all” approach, which often had devastating effects on communities who had varying needs from varying sections of roads.

It is important that context be understood in terms of transportation. Relevant questions include: What role does the street play in the transportation network? How do vehicles and pedestrians use the road? What are the adjacent land uses? What is the desired speed of traffic? What are the important natural features to be protected?

Once context is understood, design can be applied to accommodate a variety of roadway conditions. The width of travel lanes can be adjusted based on the speed of traffic and the level of pedestrian activity; roadways with wide travel lanes tend to promote speeding and have potential effects on pedestrian levels of service. Sidewalk availability and width can vary between urban, suburban and rural settings; wider sidewalks may be more appropriate in urban settings than suburban settings. Street trees are an



CONTEXT-SENSITIVE STREET DESIGN LOOKS TO LOCAL CONDITIONS TO DETERMINE THE BEST POSSIBLE STREET DESIGN THAT OPTIMIZES MOBILITY AND SAFETY FOR ALL MODES OF TRAVEL, WHILE RESPONDING TO THE CHARACTER OF ADJACENT LAND USE..

important component in terms of aesthetics, provision of shade and preservation of local character. On-street parking should be accommodated where needed and where supported by retail demand or pedestrian activity. Bicycle facilities should be designed based on bike travel demand. Streets should be designed and operated to enable safe access for all users. Pedestrians, bicyclists and motorists should be able to safely and comfortably move along and across a street.

In many communities across the country, a movement is growing to “complete the streets.” States, cities and towns are asking planners and engineers to build road networks that are safer, more livable, and welcoming to everyone. Instituting a complete streets policy ensures that transportation planners and engineers consistently design and operate the entire roadway with all users in mind—including cyclists, public transportation vehicles and riders, and pedestrians of all ages and abilities.

Streets Handbook

Raleigh should be commended for its continued policy commitment to complete streets and context-sensitive street design in the Comprehensive Plan; however, the current standards pay little attention to creating streets

that accommodate a variety transportation choices. Current cross-sections do not account for bicycle lanes; sidewalks, if required, are set back from travel ways less than four feet and the deep setbacks required by the various zoning districts create a no-man’s land from the front door (or parking lot) to the edge of the curb. There is little about the current rules that advocates for good urban design. In fact the rules discourage the creation of streets where anyone would want to socialize, much less walk or exercise.

The City of Charlotte was recently recognized by the Environmental Protection Agency (EPA) for the recently created Urban Street Design Guidelines. The Urban Street Design Guidelines are intended to create “complete streets”—streets that provide capacity and mobility for motorists, while also being safer and more comfortable for pedestrians, cyclists, and neighborhood residents. The Urban Street Design Guidelines include information about why this new approach to planning and designing streets is necessary, how the guidelines should be applied, and how specific design features should be used for different types of streets.

The Comprehensive Plan specifically calls for the preparation of new street standards that address all modes of travel. In preparation of the UDO, a new set of “complete



PHOENIX, AZ. COMPLETE STREETS—DESIGN AND OPERATE THE ENTIRE ROADWAY WITH A VARIETY OF USERS IN MIND.



CHARLOTTE WAS RECENTLY RECOGNIZED BY THE EPA FOR THEIR URBAN STREET DESIGN GUIDELINES.

street” cross-sections should be developed that also address the character and context of adjacent land use.

Streetscape

As previously stated, the area between the façade of the buildings and curb is often referred to as the streetscape. It sets the stage for our experiences as we walk, bike, or drive down a street. One way to think about it is to imagine that the streetscape comprises the walls, floor, and furniture of our neighborhood living room. A wide variety of streetscape elements constitute and enliven the street.

Street trees increase the desirability of pedestrian activity, enhance the civic status of the street, and increase adjacent property values. Trees mitigate the urban heat island by reducing air temperatures and providing shade. They also produce a cleaner air quality by reducing smog levels. The relationship of vertical height to horizontal width of the street is an important part of creating a properly configured space or “outdoor room.” While providing shade and lowering street and sidewalk temperatures, street trees create a sense of closure in a vertical plane, increasing the pedestrian experience. Street trees should be required along all streets. For streets with lower design



WIDE SIDEWALK, SHADED WALKWAY, INTERESTING SHOPFRONTS, ALL REPRESENTATIVE OF A PLACE DESIGNED WITH THE PEDESTRIAN IN MIND.

speeds and space for parked cars, trees should be located closer to the street.

Sidewalks are an important part of the streetscape; sidewalks accommodate pedestrians along the roadway and they are just as important as the provision of travel lanes for vehicles. The sidewalk can either be placed flush with the roadside edge or next to a buffer area, such as a planted strip, located between the sidewalk and roadway. Sidewalks can also provide space for street amenities.

Streetscape amenities are the objects of the streetscape beyond those associated with street trees and sidewalks.



LIMITED SIDEWALK, WIDE STREET, OVERHEAD POWER LINES, OTHER PLACES ARE DESIGNED SOLELY FOR THE MOTOR CAR.

Numerous pieces of street furniture are intended specifically for pedestrian use, and act as the most significant amenities for the pedestrian; this includes lighting, waste receptacles, drinking fountains, benches, bicycle racks, bus stops, signage kiosks, and newspaper vending areas.

Raleigh has developed a system of Pedestrian Business Overlay Districts which incorporate detailed streetscape standards in plans for specific areas, such as Cameron Village and Glenwood South (see “Current Plans & Guidelines” on page 123 for a review of these plans). This, however, means that only certain areas of the city receive the appropriate level of streetscape design, leaving vast



portions of the city without the prescriptive level of detail needed to create an inviting, walkable place (see also “Pedestrian Business Overlay Districts” on page 20). One approach to consider would be to incorporate a complete set of contextually sensitive streetscape standards in the UDO that would apply citywide, while allowing the standards in the existing streetscape plans to be pre-approved equivalent alternatives within their designated locations. Also, as previously stated, each Pedestrian Business Overlay District and the associated streetscape plan should be reevaluated in light of the Comprehensive Plan and national best practices.

Walkability and Bikeability

Increasing pedestrianism and bicycle ridership, from both a recreational standpoint and as a mode of everyday travel, is a major indicator of how successful a city’s sustainability efforts have become. In the majority of cases, the walkability and bikeability of a city can be determined by the level of commitment of local government. In both the Comprehensive Plan and the Bicycle Transportation Plan, Raleigh has renewed its commitment to becoming a pedestrian- and bicycle-friendly city.

The evaluation of any non-motorized network is classified by two key elements—by the journey itself and by the destination. The journey consists of the characteristics of the various elements of the trip—the width of the sidewalk

or bike lane, the connections between various developments, and the quality of the street edge (blank walls and multiple driveways versus continuous active shopfronts). Ensuring a safe and pleasant journey is important if you want to encourage and foster pedestrian and bike activity. The destination, or those shops, churches, schools, and other venues at the end of a journey, are the primary determinants as to whether an individual chooses non-motorized transportation over the use of the car. This is directly tied to the importance of mixed use places. Providing key destinations for pedestrians and cyclists is important if you want to get individuals out of their motorcars and into other forms of transportation such as bicycles, buses and trains. A pleasant journey and a key destination are necessary elements needed to achieve

some measure of long-term sustainability, improve health and happiness and reduce dependence on the car.

At present, the sidewalk standards are located in the Streets, Sidewalks, and Driveway Access Handbook. To enhance the link between walkability, land use, transportation and sustainability, the standards in the Handbook should be incorporated into the UDO.

The Handbook only requires sidewalks on one side of all collector and local streets. Sidewalks are required on both sides of all arterials and thoroughfares. This is inconsistent with the Comprehensive Plan which calls for sidewalks on both sides of all streets regardless of hierarchy or classification.

The Handbook also specifies a minimum five-foot sidewalk uniformly on all street types (local, collector, arterial, thoroughfare) regardless of roadway classification or hierarchy. The Handbook's "one size fits all" approach to sidewalks pays little, if any, attention to the context and character of adjacent land uses. High pedestrian traffic areas like downtown should have wide sidewalks on both sides of the street. By contrast, in small rural neighborhoods where the traffic is low and the priority for water quality protection is high, sidewalks may be excluded altogether.

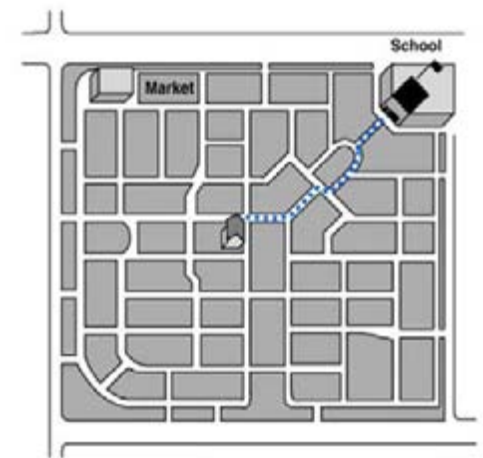
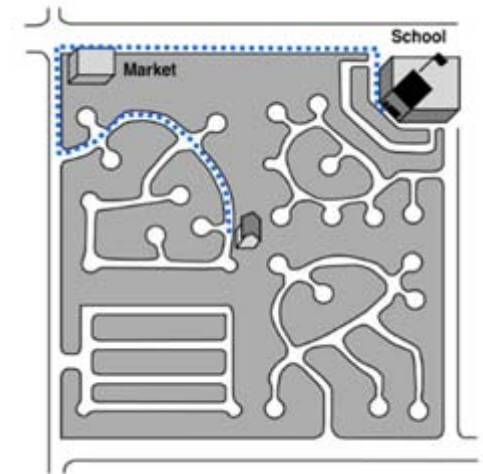
The Bicycle Transportation Plan includes several recommendations as to how a new set of development regulations can help increase bicycle ridership. The Comprehensive Plan calls for revised street cross-sections to include enhanced sidewalks and bicycle lanes.

The current regulations require bicycle parking in both the Transit Oriented Development Overlay District and in the Pedestrian Business Overlay District. The city should consider expanding these requirements into a more comprehensive citywide bicycle accommodation system. Additionally, steps should be taken to develop standards for bike lanes within specific street cross-sections.

Connectivity

Street connectivity is an important element when thinking about sustainability. Connectivity refers to the directness of travel routes between any two locations, and the number of alternative routes available for traveling between any two locations. Connectivity in turn affects the environment, sustainability, long-term adaptability, and other quality-of-life issues.

There is a direct correlation between the walkability or bikeability of a place and the level of overall connectivity. Today, many short trips that could be made by bike or on foot are made by car simply because of poor connectivity.



BETTER CONNECTIVITY CAN IMPROVE AN AREA'S VITALITY AND SENSE OF PLACE, REDUCE TRAFFIC CONGESTION, AND IMPROVE HEALTH.

Creating better connectivity for pedestrians and cyclists can improve an area's vitality and sense of place, reduce traffic congestion, and improve health. An interconnected street network absorbs and diffuses traffic rather than concentrating it in one location. High connectivity reduces emergency response time. Vital public and private services, such as postal, sanitation, and bus service, can be delivered more efficiently. Variety, choice and convenience to the traveler are provided through the opportunity of using multiple routes and air quality is improved through reduced vehicular trip lengths and the reduction in vehicle emissions

The current regulations do not adequately address connectivity, from either a pedestrian/bike perspective or automobile perspective. For example, the Streets, Sidewalks, and Driveway Access Handbook sets a maximum block face length of 1,500 feet along commercial, collector, residential and minor residential streets. A more appropriate range in an urban context would be a 300- to 500-foot maximum block length. Further, large block lengths in an urban setting force traffic onto fewer roads, resulting in the need for a network made primarily of wide arterial streets that inherently are not pedestrian- or bicycle-friendly. Different areas of Raleigh may demand

different levels of connectivity, and this should be addressed in the UDO.

There are a number of approaches to regulating connectivity. One approach proposed in the Comprehensive Plan involves the calculations of links and nodes to create a connectivity ratio. Other cities have addressed this issue through a combination of regulations focusing on maximum block face and maximum block perimeter by zoning district or context area. By placing reasonable limits on the size and length of blocks, overall connectivity is increased. As the block face distance shortens, the permeability of the street network increases. The approach selected in Raleigh is not as important as ensuring that connectivity is regulated in a contextually-sensitive manner.

Parking

Transportation experts have widely varying opinions on transportation, traffic congestion and parking issues. Some believe that traffic congestion can only be addressed by increasing requirements for off-street parking spaces, while others claim that increasing the parking supply will simply lead to more congestion. The availability of parking does, however, influence an individual's choice to drive, walk, bike, or take the bus or train.



INCORPORATE SHARED PARKING AND ON-STREET PARKING AS FLEXIBLE WAYS TO MEET PARKING REQUIREMENTS.

Right Sizing Parking

National transportation and parking consultant Nelson/Nygaard recently reviewed the city existing parking requirements. The study, Right Sizing Citywide Off-Street Parking Standards, contains a critical analysis of the city's existing parking provisions and offers recommendations in light of national best practices and current industry standards. Many of these parking provisions need to be addressed within the UDO:

- Incorporate shared parking and on-street parking as flexible ways to meet parking requirements.
- Establish criteria for shared parking as a means to reduce overall parking supplies and meet demand based on context; enable the use of a shared parking methodology and analysis for certain contexts.
- Develop criteria and requirements for bicycle parking.
- Tailor parking requirements to context and consider modal influences along with land use typology, especially in mixed use, walkable, and transit-served areas.
- Incorporate maximum parking requirements as well as minimums for all context types.
- Reevaluate parking requirements for uses in the development regulations

A system establishing a payment-in-lieu of parking in downtown and other mixed use centers may be another innovative approach to consider.

Alternative Parking Plans

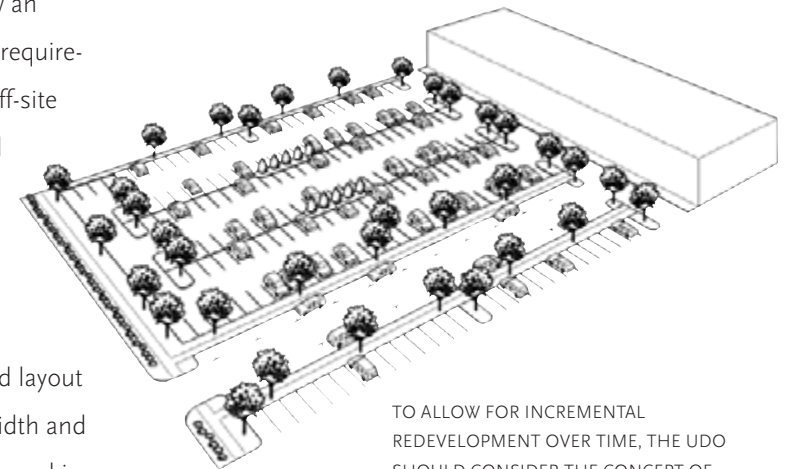
The current regulations recognize that it may be difficult to meet the parking provisions and therefore allow staff some discretion to reduce parking requirements in certain settings. A more universal method for negotiating parking requirements would allow an applicant to submit an alternative parking plan. An alternative parking plan allows an applicant to submit data that justifies a reduced number of required parking spaces or shows how an applicant proposes to meet their current parking requirements in less conventional ways (valet parking, off-site parking, joint parking, shared parking, automated parking, transportation demand management, space swaps).

Parking Lot Design

Little attention is currently given to the design and layout of parking lots. Basic standards such as depth, width and angle of parking spaces and drive aisles are addressed in the Streets, Sidewalks, and Driveway Access Handbook. Additionally, the current regulations provide standards for parking lot landscaping. To improve the aesthetics and

functionality of large parking lots, and allow for incremental redevelopment overtime, the UDO should consider limiting parking areas (or “parking rooms” as they are sometimes called) to no more than 200 spaces. The parking room should be connected to an internal system of complete roadways with internal landscaping, street trees and pedestrian sidewalks. To reduce the number of access points into and out of the development, outparcel access should be taken from within the site.

Another aspect that the current regulations do not adequately address is cross-access between developments.



TO ALLOW FOR INCREMENTAL REDEVELOPMENT OVER TIME, THE UDO SHOULD CONSIDER THE CONCEPT OF “PARKING ROOMS.”

Cross-access allows pedestrians and motorists to move easily from one development to another without using the adjacent roadway system. Raleigh should continue mandating vehicular and pedestrian cross-access connections that serve adjacent and surrounding development. An incentive-based approach could offer some flexibility in exchange for the removal of curb-cuts on existing sites. For example, a reduction in required parking spaces could be offered for the removal of a curb-cut on certain roadways when redevelopment occurs.

Transit

The Comprehensive Plan acknowledges the importance of transit-oriented development. The Plan defines transit-oriented development as “moderate to high-density mix of uses, such as residences, retail shops, offices, and civic and entertainment uses, located within one-half mile of a transit station and designed to support transit use.” These transit-oriented development sites would be linked together through a network of multi-modal transit corridors. The current regulations provide some standards for transit-oriented development through the use of an overlay district (TODOD), but to date the overlay has not been applied on the ground.

Raleigh is promoting the use of transit through its planning practices and land use controls, and the street and site development standards should account for pre-approved transit-related facilities such as bus stops, bus bays, and rail stops that would otherwise require deviations from the standards in order to be approved. The UDO should incorporate provisions for bike lockers and bike parking at transit stops and station areas. The UDO should formalize and articulate guidelines for parking requirements in station areas, including evaluation of the potential for car-free residents and patrons. Parking reductions should be allowed for proximity to transit, and applicants should be allowed to provide transit service enhancements in exchange for reductions in site-specific parking requirements.





6. RETAINING & ATTRACTING JOBS

KEY ISSUES

- **Industrial**
Reduce retail uses in pure industrial districts.
Develop new districts to accommodate tech sector and light manufacturing.
- **Live-Work**
Where feasible, encourage home occupations and live-work uses.
- **Universities**
Develop rules specifically for large-scale institutions.
- **Arts & Culture**
Develop a district that permits live-work, studios, galleries, and artisan manufacturing.



THE TECH SECTORS NOW VALUES NEARBY HOTEL AND RESIDENTIAL OPPORTUNITIES AS OPTIONS FOR VISITORS AND WORKERS.

Industrial Districts

Raleigh's industrial districts do little to protect land for future industrial use. By allowing many commercial options (including retail and restaurants), the cost of land is driven up to the point where many conventional industrial users may not be able to afford to stay. This is a remnant of earlier days in which zoning was often “pyramidal” or “cascading”—allowing all uses permitted in prior, less intense, districts in each successively more intense district, culminating with industrial districts that allow all uses.

Our experience in other communities is that portions of industrial districts that have evolved into shopping or office areas are no longer viable for future industrial infill. This means Raleigh will need to determine where remaining industrial lands offer an opportunity for consolidation of industry without the threat of commercial or residential intrusion. The Future Land Use Map provides a General Industrial category that should be considered for exclusive industrial areas. These areas should be protected with an industrial district that allows a more restricted set of uses related only to such things as manufacturing, warehousing and distribution. If the set of permitted uses

includes restaurants or retail services, such uses should be controlled to ensure they remain accessory to the industrial uses.

One additional problem with some of the existing historically industrial lands is that they lie in designated Critical Areas (such as floodplains and stream buffers). This is inappropriate for the long term, and Raleigh should consider Critical Areas in the application of any future industrial districts.

Tech Sector and Mixed Use

As a companion to any new or revised industrial districts, a more flexible approach to accommodating the emerging tech sector (office, research and development, and flex space appropriate for office/distribution uses) may be needed. However, some consideration of this district as part of a series of mixed use districts is appropriate (see also “Regulating Mixed Use” on page 10). Many tech sector industries value nearby hotel and residential opportunities as options for their visitors and workers. In addition, restaurants and retail services can help support nearby daily workers and evening residents. Supporting the tech sector could be accommodated by either using series of commercial or residential districts, or by a using

HOME OCCUPATIONS AND LIVE-WORK OPPORTUNITIES HAVE BECOME A KEY STEP TOWARD PROMOTING SUSTAINABILITY.



one mixed use district with options for the appropriate types of uses and necessary to accommodate the tech sector. The Future Land Use Map contains a category for Office/Research & Development, which is clearly directed at Tech Sector companies.

Home Occupations

Home occupations and live-work opportunities have become a key step toward promoting sustainability and encouraging entrepreneurship. Remember that many of today's largest companies were started in a garage!

Raleigh must carefully consider the extent to which home occupations will be allowed in residential neighborhoods. Working from home helps to reduce vehicle miles traveled, allows for modern web-based and telecommuting careers, and permits more flexibility for families with young children or elderly relatives needing care. Home occupations can come in a variety of forms and intensities.

Home offices have no visible elements or external impacts such as an architect or realtor working out of their house. No customers or employee would come to the site.

Home-based businesses may be visited by customers, may have modest external impacts such as periodic deliveries, may include a small sign, and may even include one or two employees. This slightly more intense version might include a small hairdressers (typically considered retail or personal services) or a cabinet-making shop (typically considered industrial).

Live-work allows multiple visitors and employees where the entire building type is intended for shared business and residential purposes. Live-work may allow for a variety of fairly intense commercial uses. Live-work can be either a “Soho loft” model where living and working occur in the same physical space, or “live above-work below” in which the units are physically separate, but joined either vertically or horizontally.

Many newer subdivisions have existing covenants or deed restrictions prohibiting home-based businesses, which will over-ride any provisions in the UDO. It is the city's older neighborhoods with expired covenants or deeds that will offer additional opportunities for home-based businesses embedded in the fabric of a neighborhood. Raleigh currently permits home occupations as conditional uses provided they meet certain performance standards. This approach and the performance standards will be reviewed and updated to account for the needs of modern home-based businesses.



Campus Districts

There are several common approaches to campus and large-scale institutional districts, and they are discussed below.

Transition Model

Durham's University-College District (UC) differentiates internal campus areas from edge areas. At the edge of campus, it is presumed that the "perimeter transition area" of a campus or large-scale institution directly impacts nearby non-campus properties, and this area has stricter regulations than the internal campus.

Internal campus standards tend to be general and flexible regarding height, setbacks and other dimensional

standards, whereas the transition area standards are more specific and detailed, regulating elements such as development intensity, parking and building façades.

In Durham, areas within 150 feet of the

perimeter of the University-College District are designated as part of the transition.

Plan Model

Districts that include campus and institutional uses often require a plan approved by elected or appointed officials. Approved plans control how the campus or institution develops and must be brought back for reconsideration whenever a major change occurs. In this fashion, these districts act like planned developments. One key question is how significant a change to a plan must be before it is considered major, and conversely what changes may be considered minor, therefore not requiring a trip back to the elected or appointed officials. For instance, a change

in use of a building on the campus could often occur by right. One performance-based standard to gauge this distinction might relate to the scale of the proposed change (for example an increase of impervious cover no greater than five percent or 5,000 square feet).

Consideration of New Models

The city should be working with the Consortium of Raleigh Colleges (CRC) to discuss the potential of various approaches, and the practicality for Raleigh's various institutions.

Arts & Entertainment Overlay

The Comprehensive Plan calls for the creation of an arts & entertainment overlay district in order to accommodate a number of interests key to retaining an active arts community. Concepts include:

- Artist's studios, live-work units
- Visual or performing arts venues, museums, theaters
- Galleries, art centers, art schools
- Art supply stores, bookstores

Raleigh's existing arts and entertainment areas, including Moore Square, the emerging areas along Glenwood

Avenue, the Warehouse District, and Midtown Entertainment District, all developed based on private market responses—not in response to site-specific zoning. There may be barriers to these types of arts-related uses in the existing regulations that should be revisited, such as the need for small-scale fabrication (welding and glass-blowing, for example); however, the Comprehensive Plan suggests overlay districts that mandate arts-related uses. There is some concern that mandating any specific uses (whether it be retail or arts-related) may narrow the market opportunities, resulting in a reduction of activity, instead of the intended expansion. The City of Raleigh Arts Commission provides financial support to arts and entertainment areas, and this fiscal model may prove more effective than any specific overlay district.

A careful review of the districts mapped in the existing and emerging arts and entertainment areas should occur, and at minimum, flexible mixed use districts should be applied that allow the intended mix of uses to occur in response to the market's demand for them.



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7. RULES FOR OLDER AREAS



KEY ISSUES

- **Historic Districts**
Protect historic areas through the continued use of historic districts.
- **Infill Subdivisions**
Removing barriers to infill subdivisions.
- **Contextual Infill**
Ensure compatibility with the character of existing neighborhoods.
- **Neighborhood Conservation**
Revise to recognize context and character.



Raleigh's residents agree—in order to promote a sustainable city, steps must be taken to stop urban sprawl in its tracks. This will not be an easy task. Over the next 15 to 20 years Raleigh is anticipating significant growth. If this growth is not channeled into the right locations, then the future settlement patterns will continue the low-density pattern that Raleigh has seen over the past few decades.

In order to shift these settlement patterns from what is on the ground today to what is called for in the Comprehensive Plan, Raleigh must overhaul its current regulations. The end result must be a UDO that codifies the policies of the Comprehensive Plan in a manner that encourages growing Raleigh from the inside out.

Historic Preservation

Portions of what would normally constitute a preservation ordinance are distributed in several places in the current regulations. The makeup of the Historic Commission and its powers are described in one location. The criteria for designating properties as historic resources are listed in another and the provisions for requiring minimum maintenance of a property are in yet another location.

While this distribution of components reflects the good intention of a consolidated code, in which duplicative elements are minimized by referring to other sections that apply to more than one type of regulation, it is difficult for a layperson to gain an overview of the preservation regulations as a whole. The city has compensated, to some extent, by creating guides to the regulations, in hard copy and on the web. Nonetheless, a property owner who is seeking to understand the full implications of landmark status or who wishes to understand the process will likely find the current organization confusing. “If you don’t know what to look for, then you don’t look for it,” was one stakeholder’s observation.



Key preservation ordinance elements distributed throughout the current regulations include:

- Criteria for determining significance;
- Criteria for determining appropriateness;
- Delegation of certificate of appropriateness authority;
- Demolition;
- Economic hardship;
- Enforcement;
- Incentives and benefits;

- Roles and responsibilities of staff and Commission members; and
- Policies for historical markers and other interpretive devices.

The city’s historic preservation component is primarily housed in Section 10-2052 of the current regulations. It defines the mechanism for reviewing proposed improvements for appropriateness. To do so, this section provides basic criteria for determining appropriateness and further references more detailed design guidelines

that may be adopted to augment interpretation of the standards.

In many respects these code components are “state of the art,” reflecting current thinking about preservation regulations. What is not clear is how these elements link to incentives that may be available, or to other planning considerations.

General Issues

While the existing preservation code components appear sound, the city designated its last local historic district in 1984. This may reflect a resistance to designate, in part because the review process is perceived as being too restrictive. For some, this is a fundamental issue of property rights, but for others it may reflect a lack of understanding of the rules, including the requirements and design guidelines, and the degree of flexibility that may be available to property owners in making improvements.

In some cases, the historic tool may not be the appropriate one to use. The historic district has specific requirements for eligibility that prevent it from being used in some neighborhoods. It may not apply in some areas for these reasons:

1. The area does not meet the criteria for significance.
2. The neighborhood does not support the level of review associated with historic district designation.
3. The city cannot administer the district at the level required.

Missing Level of Designation

The lack of recent district designations may also indicate that other tools are missing in the current system. Many communities today employ a “conservation district” as

a related, but different, designation, in order to address methods of maintaining neighborhood character and to some extent conserving cultural resources. (In Raleigh, some have termed this concept HOD2.) Maintaining neighborhood character is the objective, and specific standards and guidelines are tailored to the context. (This is related, but very different from the NCOD that Raleigh currently uses, which is much more limited in its scope than conservation districts used in other communities—see the separate discussion of NCOD on page 64.)

Other issues that were raised by stakeholders indicate areas that should be addressed. Some of these reflect emerging trends in preservation that the preservation regulations will need to anticipate. This also highlights that, with a preservation element that is scattered throughout the current regulations, it may be more difficult to amend and update as new ideas emerge in the field.

Emerging Preservation Issues

Emerging preservation issues to address are discussed in the following paragraphs.

Expanded Roles of the Commission

What is the role of the Historic Commission in areas that are not officially listed? Should they play an advisory





role outside of historic districts? For example, in areas that are potentially eligible for historic district designation or perhaps adjacent to designated districts, should the Commission provide comments in site plan review? Should they participate in development of standards for NCODs that have historic resources within them?

Cultural and Archeological Resources

How will cultural landscapes be addressed? Should the UDO include the ability to designate or in some other way consider impacts on historic parks, battlefield sites, and even archeological sites?

Sustainability and Preservation

Maintaining existing structures, and especially those of historic value, is now an important strategy for sustainability in most communities. How will the role of historic

resources be stated for the city's sustainability initiatives, and how will these be reflected in the UDO?

Minimum Maintenance Criteria

Even though the city has a minimum maintenance clause in the current regulations, there is concern that it is difficult to cite and enforce. Are there means of strengthening this?

Historic District Edges

Development that abuts a historic district can impact its character and well as the investment climate. Currently, the Historic Commission only reviews site plans and development plans in these edge area as a courtesy. Should there be some mandatory review by the preservation office or Historic Commission in these critical edge areas?

Incentives in Historic Districts

Some communities allow certain uses in historic properties or within historic districts that otherwise would not be allowed. Permitting detached accessory structures in a single-family neighborhood, or allowing a bed and breakfast establishment are examples (see also "Accessory Dwelling Units" on page 31). In other cases, providing flexibility in lot coverage, building setbacks and other basic site development standards is available to historic properties. These are not readily discernible in the current regulations. To what extent should such incentives be offered in the UDO?

Expanded Design Guidelines

Raleigh has a separately published document, “Design Guidelines for Raleigh Historic Districts,” adopted in 2001. These provide substantial information about the treatment of historic properties, but have less guidance specific to new construction within historic districts. The appendix of the design guidelines includes brief descriptions of the characteristics of the historic districts, but not special guidelines about new construction. In many cases, the community’s willingness to accept certain types of new construction will be influenced by guidelines. In the absence of good guidance, the underlying zoning will become more of a force, and “compatibility” may be a more abstract discussion. In this light, what will be the relationship of UDO standards to the preservation guidelines?

Demolition Review Outside of Districts

Some communities provide for a preliminary review of demolition permit applications outside of historic districts, in terms of the potential historic significance of the property. In some cases, this occurs for any property over an established age threshold (often 50 years), or for properties listed in the National Register or determined

eligible for listing in it. Procedures are often established for considering this factor in other site plan reviews, or when considering offering or withholding incentives for other types of development. These are not addressed in the current regulations.

Embodied Energy

Raleigh has established a goal of being a leader in sustainability, and more provisions related to resource conservation and green building are likely to be codified in the UDO. The Preservation Element of the Comprehensive Plan acknowledges the value of the energy “embodied” in existing buildings, energy that was consumed to create the structure, and notes that this is lost when an existing building is demolished.

In terms of historic preservation specifically and neighborhood conservation in general, this concept will become more of an issue as green building codes move forward. This is not addressed in the current regulations.

Furthermore, there may be requirements in the regulations that encourage demolition and replacement of a building, rather than remodeling or constructing additions. One possible response is to allow appropriately



compatible additions to existing buildings more easily, or to built slightly larger, than new construction.

Compatibility Tools

Infill Subdivisions

One significant barrier to reinvesting in the residential core of the city is the added layer of procedures required for approval of “infill subdivisions.” While the intended purpose is to protect the character of existing neighborhoods, the end result is a penalty to reinvestment in the most sustainable areas for such activities.

The city uses a very specific definition of infill. This focuses on lots which are assembled and reconfigured



for new development in established residential areas. Constructing a new single-family house on an existing lot of record is not a part of this definition of infill.

The city provides for site plan review of projects deemed to be infill. Limiting the term infill to this specific application is understandable in terms of the way the current regulations are applied, but it can lead to confusion for some citizens, who may perceive any new construction as “infill” in their neighborhoods, and thus may not understand why certain changes in the area are not subject to special review.

The current regulations place additional approval requirements on the subdivision of “infill lots or infill projects.”



It is unusual for subdivision regulations to treat the procedure for infill subdivision differently from greenfield subdivision. If the purpose of this provision is to control lot splits in older areas, then it is simply serving as a patch on a broken system. Lot splits are typically the easiest type of subdivision to achieve, and in many communities, occur at the staff level. Where a 10,000 square foot lot exists in a district allowing single-family homes on 5,000 square foot lots, the lot can ordinarily be easily surveyed and split into two buildable lots.

If the focus of the infill subdivision requirements is primarily on the resulting lot area, the more effective solution would be to simply rezone the areas of concern

to zoning districts that reflect the desired lot size. If the focus is on the character of infill development, the following concepts may serve as better mechanisms to ensure compatibility.

Contextual Infill Standards

Many communities are ensuring basic compatibility between infill development and the established character of existing single-family neighborhoods by applying a series of contextual infill standards (see also “Transitions” on page 26). These standards often ensure compatibility of certain features such as setbacks, massing, bulk, height, impervious surface, and garage placement. Clear and quantifiable infill standards can be approved administratively. In areas where the regulated setback area differs from the established setback for the area, infill development may be required to build within the range of existing setbacks. Contextual infill standards may require new houses to be built with rear-or alley-loaded garages if the majority of existing homes on the block face also contain rear- or alley-loaded garages.

To limit any potential new standards to infill settings, some communities have established an applicably trigger such as all subdivisions platted prior to a certain date.

Neighborhood Conservation Overlay Districts (NCOD)

A second tool in the city's compatibility toolbox is the Neighborhood Conservation Overlay District (NCOD). Both the Comprehensive Plan and the current regulations repeatedly use language referring to transitions, sensitive edges, and compatibility of new construction.

The purpose of the NCOD is to provide neighborhoods that may not be historic with the means to voluntarily protect their unique established character. They can also be used to provide historic neighborhoods with a review process that is short of the perceived onerous review received in designated Historic Overlay Districts.

The NCOD program has been the subject of substantial discussion in the past three years, and some revisions to the regulations have occurred as a result. Essentially, the current regulations allow the establishment of a special overlay when certain locational criteria are met, and also when certain design objectives are defined in a contextual analysis. This is a simplified version of an earlier requirement to have a neighborhood plan in place. The purpose is to have a method of tailoring standards to local condi-

tions. While this is an important concept, there are some key elements missing in the current process.

Determining Character or Context

While the specific features of a neighborhood in various parts of the city are expected to vary, a sound process for evaluating character is not clearly articulated. Staff may be applying such a process internally, but it is not prescribed, and therefore not clear. There is also no assurance of consistent application of the review process over time without this contextual baseline. This is a fundamental issue, because the tool can only be as effective as the analysis of character that underpins the regulating standards.

Neighborhood Context

While the concept of "context" is widely discussed in site plan review, there is no clear, definitive method of defining it. A definition in the current regulations provides some guidance, but is still difficult to interpret. This leaves the process open to a wide range of interpretations, simply based on how broad a net one casts in considering the setting. Some context features are clearly identified, while others are suggested in broad terms. One could argue that the more general terms are not

subject to regulation, or at least are difficult to enforce. Regardless, these definitions should be updated and relocated to one master definitions section in the UDO.

Addressing Other Design Variables

There is some discussion that the NCOD should reach deeper into details of design related to quality of materials and site design. That is, the NCODs should be even more contextually based. If so, then some balancing of prescriptive standards and more discretionary design guidelines may be appropriate to explore. If not, then this may be an approach for a separate tool.

Neighborhood Plan Interface

The prior NCOD required that a neighborhood plan be developed. The intent, with respect to development regulations, was to establish a context for defining certain prescriptive standards that would be relevant to the district. This has been amended, but those existing plans can cause some confusion in terms of how they relate to enforcement of the standards embedded in the current regulations, versus those and other policy statements in the neighborhood plans. This means that broad policy objectives may sometimes be pulled into the development review process.

There is no clear distinction in the NCOD between a prescriptive standard that can be handled administratively and a qualitative objective, which may, or may not, be valid to consider during the plan review process. There also appears to be some conflict in the current regulations where in some cases, old language references the neighborhood plans.

The Form of Parking

Parking is the often the “Achilles heel” of infill and redevelopment. Raleigh must implement the recommendations of the recent parking study either in advance of or in the UDO. However, even in the most aggressive transit and multi-modal vision of Raleigh’s future, there will still be surface and structured parking. It is critical to the character of older areas that the streetscape not be dominated by parking.

New rules that ensure controls for parking are important. Don’t place surface parking in front of buildings—locate parking in courtyards, behind buildings, or in parking garages. Design parking garages as mixed use buildings with ground floor retail or wrapped in residential units. Wherever possible, provide adequate shared parking to serve both residents and businesses in the neighbor-

hood. In mixed use areas, create pedestrian networks so that visitors can park once and have access to a series of activities without returning to their car (see also “Parking” on page 48).

Only with a full complement of parking-related design standards embedded in the UDO will any significant progress on balancing the environment for both vehicles and bicycling/walking.

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A group of people are seated around a large, dark, round table in a meeting room. The room has white walls and a large white pillar. The scene is overlaid with a semi-transparent pink filter. The people are engaged in a meeting, with some looking at papers and others looking towards the center of the table. The table is set with water bottles, glasses, and papers.

8. PROCESS AND ADMINISTRATION

KEY ISSUES

- **Predictable Regulations**
Develop clear and transparent approval and review procedures.
- **Site Plan Review**
Simplify and streamline the site plan review process.
- **Definitions**
Consolidate and modernize definitions.

In General

Raleigh's development review procedures and the duties of the various review bodies are scattered throughout Part 10. A single new Chapter on Administration of the UDO, containing all of the review bodies from Chapter 1, General Provisions, along with all of the administrative and development review procedures for both subdivision and zoning approvals is sorely needed.

Five of the 12 articles in Chapter 2, Zoning, focus specifically on administrative procedures such as the entitlement process, interpretation of the standards, enforcement, and fees (Articles H through L). Further, each of the first 7 articles in Chapter 2 contain bits and pieces of administrative and procedural regulations; in many cases repeating language verbatim dozens of times (see for example 10-2015(a) and 10-2064(a)). Chapter 3, Article B identifies the procedure to be followed for preliminary and final plats.

In addition to the unnecessary length due to repetition, the lack of a dedicated administration chapter leads to a web of confusing cross-references and potentially confusing inconsistencies. The combining of all the various procedural elements from the current regulations into

one administration and procedure chapter will help to reduce redundancy, eliminate conflict and streamline the use of the UDO.

Application Contents

Application contents are an unnecessary portion of the UDO. Most readers do not benefit from the inclusion of long lists or requirements for applications—these forms are applicable only to a specific party who will be providing an application. To the extent possible, application requirements should be incorporated in separate application packets, which can be improved without the need to amend the code.

Fees

Fees should not be included in the UDO, since they are subject to change on a regular basis (perhaps annually?). The city should adopt a fee schedule by resolution and distribute it with application packets.

Fair and Predictable Review

To ensure that development review in Raleigh is both fair and predictable, there are several techniques that should be employed in the revision of the existing procedures—even if there are no policy changes made.

- The UDO should be transparent about who makes decisions.
- The UDO should clarify when public input is allowed, and in what form (written, testimony)
- Review criteria should be established for all decisions—even staff-level decisions, as a framework for decision-makers.

Senate Bill 44

The process of examining the city's development regulations provides a good opportunity to examine the procedures currently used by the city, and the implications of the recent legislative enactment of Senate Bill 44. During meetings with staff and stakeholders, there was a great deal of discussion about the newly adopted bill, which became effective on January 1, 2010. The bill designates decisions involving variances, special and conditional use permits and appeals of administrative decision as quasi-judicial. The City Attorney's office has drafted an ordinance to address the effects of the bill. It is still important, however, that during the course of drafting the UDO, refinements to the process are considered to address issues that were repeatedly raised during the meetings with citizens and developers. These issues in-

clude the complexity of the process, the notices provided, the lack of clear and predictable standards, as well as the level of public involvement.

Conditional Zoning

Customized Districts

One of the first signs that a community's development regulations are not functioning effectively is the overuse of customized solutions. Raleigh uses customized regulations in two ways: Conditional Use Districts (CUD); and Planned Developments (PD). The current regulations do not effectively deal with contemporary land use issues and development patterns, and therefore these customized solutions are used to address the basic deficiencies of the current regulations.

Conditional Use Districts

Enabled by state law, Raleigh's current regulations contain a customized zoning scheme which allows the city to approve a site plan and a request for a rezoning to a conditional use district. The process allows the city, affected parties such as neighbors, and applicants to negotiate conditions of approval. Once the ordinance is adopted,

the name of the base district changes to reflect that it has a different set of rules (R-15 becomes CUD R-15).

In total, there are 24 named CUDs (one for each base district). However, in reality there could be hundreds more, with each CUD ordinance containing a different set of rules and conditions. A CUD R-6 district in one part of Raleigh may have different conditions than an CUD R-6 district in another part of Raleigh. While this approach offers almost unlimited flexibility, it also creates a confusing series of "CUD" zoning districts on the official zoning map, each with its own unique set of rules. The lack of predictability and transparency created by this practice undermines the very purpose of the development regulations. It also becomes unwieldy and difficult to enforce in the field, since the rules may be site-specific.

The city needs to carefully review recently approved conditional use districts to determine the types of conditions being applied. The next step would be to consider whether these conditions should be incorporated into the development standards for all approvals. The intent would be to move as close to elimination of conditional use district zoning as possible.

Planned Developments

Another, more traditional, tool for increasing the level of flexibility within the current zoning system is the Planned Development ("PD"). The current regulations have two general types of planned developments—Planned Residential Developments (Article F) and Planned Nonresidential Developments (Article G). Each general type of planned development is further divided into several more specific flavors, including Cluster Unit Development, Multi-Family Dwelling Development, Mixed-Use Development, or Shopping Area and Shopping Center (see also "Planned Residential Developments" on page 28).

Raleigh's current regulations include planned development regulations in both the zoning and subdivision regulations. As a best practice, we suggest that planned developments are a product of zoning more so than subdivision and as such belong in the zoning chapter of the development regulations. At the very least the elements pertaining exclusively to zoning should remain with the other zoning standards and the sections pertaining generally to subdivisions should be condensed together.

A side by side comparison of the arrangement of Raleigh's planned development regulations is particularly

troubling because the standards—regulated by the respective zoning and subdivision sections—are similar; however, the approach to regulating the standards is different enough to cause dangerous inconsistencies in interpretation and enforcement.

Planned developments should not be entirely eliminated. They do serve a purpose as a mechanism to permit innovative designs that, if planned and executed appropriately, can be successful additions to the community. Therefore, rather than eliminating the planned development as it is used in the current regulations, it should be re-envisioned from its current use-specific approach to a more general set of standards that effectively address residential, mixed use, and non-residential projects (see also “Planned Residential Developments” on page 28).

Site Plans

The site plan review process in Raleigh is very confusing. Some site plans are reviewed at the staff level as part of a building permit application (administrative site plan), some require Planning Commission approval, while others also require City Council approval. Even administrative site plans will be routed to Public Works, Public Utilities, Urban Forestry, and Parks and Recreation

when applicable. Approval of Planning Commission or City Council site plans requires a public hearing. In many communities, a site plan is used solely to determine compliance with the regulations—not as a discretionary mechanism.

If Raleigh is intent on retaining discretionary review of site plans, Senate Bill 44 may require procedural changes related to the new “quasi-judicial” nature of site plan review. A quasi-judicial proceeding occurs in a sworn setting intended to ensure testimony is provided by experts, and also allows for cross-examination of witnesses.

In many communities, the improved standards of a revised ordinance provide a level of comfort about the quality of new development that allows the staff to review and approve site plans. For example, rules regarding acceptable transitions are embedded in the code, and further discussion with adjacent landowners is no longer necessary.

Review Procedure

Although Chapter 3 contains the subdivision/site plan standards ordinance, a glance at the table of contents reveals there is no specific section on site plan review procedures (although the subdivision elements are

clearly stated). Setting out a specific procedure for site plans that parallels the subdivision process should occur in the UDO.

Site Plan Triggers

The following summary of the triggers for City Council and Planning Commission site plan review are gleaned from the city’s website. In order to find all of these variations, an applicant would need to review the entire code. It is important to review the following site plan review triggers once the new development standards of the UDO have been prepared. The appropriate level of administrative versus discretionary review may change as improved standards are crafted.

Planning Commission Site Plans

- Shopping Centers less than 130,000 square feet and located more than 400 feet from a residential use or zone.
- Free-standing retail uses located within 400 feet of a residential use or zone.
- Banks with a drive thru less than 25,000 square feet.
- Banks, offices, institutions, hotels, motels greater than 25,000 square feet.

- Parking lots/garages as a primary use greater than 80 spaces or 25,000 square feet.
- Residential institutions (churches, schools) in a residential zoning district when criteria for administrative approval are not met.
- Residential developments exceeding 15 du/ac in O&I-1 and O&I-2, SC and exceeding 20 du/ac in a Thoroughfare District.
- Certain multifamily residential and group housing projects less than five acres in size located in residential districts.
- Substantial expansions to any of the above.
- Additional density (above that allowed in the underlying zoning district), conversions to dwelling units or lodging units with 2-burner cook tops in Pedestrian Business Overlay District.
- Site plans within the Downtown Overlay District for new structures, additions or expansions to existing structures all in excess of 10,000 square feet.

Unity of Development

Many site plans also require “unity of development,” a concept of unifying the design of the site through shared primary and secondary elements: Elements can include such things as building materials, building colors, architectural features, landscaping, architectural compatibility between a permitted ground sign and buildings, setbacks, height, and lighting.

While this approach allows substantial flexibility to the developer in the response to the city’s desire for unity, it also opens site plan review to a continuing discussion of the degree of unity illustrated by each plan. A series of coordinated development standards should set the bar for quality of all development in the city, and consideration should be given to eliminating the “unity of development” discretionary review. Another consideration would

be to limit the unity of development requirements to large-scale mixed use project only.

Variances

The City Council and Planning Commission are given authority to modify the standards during review of site plans subject to a hardship test similar to that for typical Board of Adjustment variances. Consideration should be given to modifying the term of art used (perhaps waivers or exemptions is more appropriate), so that there is no confusion with traditional variance proceedings.

Nonconformities

The nonconforming provisions of the current regulations blend use and structures together, resulting in some confusion. Also, the special use permit procedure applied by the Board of Adjustment is embedded in the nonconforming provisions, even though it is applied to conforming uses as well. In general, the policy of most communities can be described as follows:

- Nonconforming uses should not be expanded, and are expected to disappear over time.

City Council Site Plans

- Shopping Centers greater than 130,000 square feet or less than 130,000 square feet and located within 400 feet from a residential use or zone.
- Free-standing retail greater than 70,000 square feet or located within 400 feet of a residential use or zone.
- Buildings 80 feet or more in height.
- Buildings in the downtown area, except six or fewer dwelling units.

- Nonconforming structures are tolerated, and should be allowed to expand to any extent allowed by current dimensional standards.
- Nonconforming lots of record should be buildable for single-family residential purposes.
- Nonconforming sites (lighting, parking, landscaping) should be brought into conformity as quickly as possible. Triggers for compliance are often set quite low—sometimes even at change of use.

Nonconforming Uses

Raleigh may not be tough enough on nonconforming uses. The current regulations allow change of an existing nonconforming use to another nonconforming use (many communities do not). In addition, a nonconforming use may be expanded through the special use process (most communities do not allow any expansion of a nonconforming use).

The city might also consider reducing the time period for abandonment of a nonconforming use to six months from the current one year.

Nonconforming Structures

The city is currently very restrictive about increases in area of nonconforming structures (allowing only 25 percent expansion without special approval by the Board of Adjustment). In many instances, nonconforming

structures are created inadvertently through resurvey of existing lots. Where additions to existing residences occur consistent with zoning dimensional standards such as setbacks and lot coverage, should special permission be required at all? Many communities no longer require special approval for additions that meet all of the current dimensional standards (as applied to the addition only).

Nonconforming Sites

The current regulation contain an innovative provision allowing substitution of impervious surfaces—for example, construction of a building on a former parking area. This provision should encourage redevelopment over time.

Overall, the nonconforming provisions should be rewritten with a focus on clarifying both policy and specific requirements.

Enforcement

The enforcement provisions are clearly set forth in the current regulations. If there are issues related to enforcement, they are due to either lack of personnel, and lack of adequate training. The current regulations appear adequate to ensure reasonable enforcement.

Definitions

The current development regulations contain close to 40 pages of definitions scattered across nine chapters,

with some chapters having several internal definitions sections. Several pages worth of these definitions are repetitive, appearing multiple times throughout Part 10 and occasionally the same term is defined in different ways.

There is a lack of consistent numbering for definitions in the document. Finally, several of the definitions include regulatory language going beyond an explanation of the term being defined and prescribing development standards.

The UDO will revise many of the existing definitions adding required new definitions and eliminating any obsolete definitions. The consolidation of all definitions into one Chapter, providing one set of uniform and consistent definitions for the all of Raleigh's development regulations, is also a key component of developing the UDO.



9. CODING APPROACH

KEY ISSUES

- **Context**
Acknowledge context, develop the right rules for the right place.
- **Districts**
New zoning districts are needed to fully implement the future land use plan.
- **Form-Based Controls**
Incorporate form-based controls to promote vibrant, walkable, mixed use places in downtown and other City Growth Centers.
- **Mobility**
Establish standards for complete streets and rules promoting high connectivity.

Introduction

The proceeding chapters have gone to great lengths to explain the consultant team's understanding of the current rules and regulations in place today in Raleigh. The team has critiqued the existing requirements and identified inconsistencies and gaps between the current regulations and the recently adopted 2030 Comprehensive Plan. This chapter sets forth several new concepts that the consultant team will work through with the Raleigh planning staff and Administrative Working Group. Some of the proposed concepts and ideas have been used successfully in other communities, while others may be new and unique to Raleigh. One thing that is important to stress is that none of these approach ideas are set in stone. They are presented for the city's consideration and to help gauge the tolerance for change in Raleigh.

Context & Character: Right Rules, Right Place

The UDO could go a long way toward achieving the type of built environment that Raleigh desires, as set forth in the Comprehensive Plan. This will only be the case if there is a way to ensure that the right rules are applied in the right places. Acknowledging context will help to

IT IS IMPORTANT TO GET THE RIGHT RULES IN THE RIGHT PLACE: THE WALGREENS ON THE LEFT CLEARLY BELONGS IN A MORE URBAN SETTING, THE WALGREENS ON THE RIGHT IS MORE SUBURBAN IN CHARACTER.



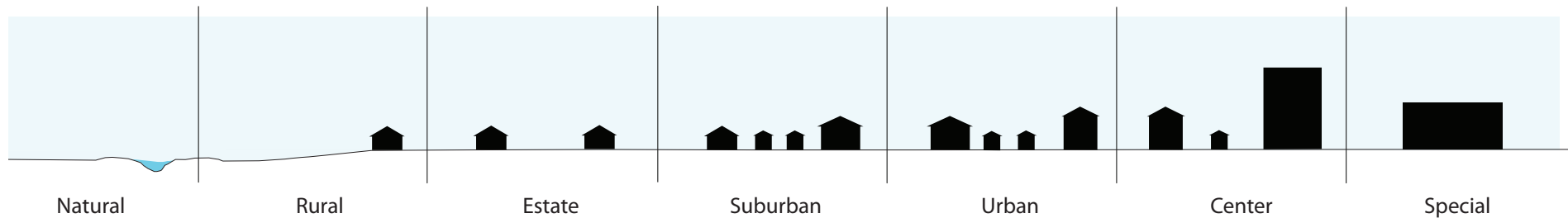
ensure that rural areas stay rural and urban areas stay urban. No community is one size fits all, and their development regulations shouldn't be either. The single most important aspect in drafting the UDO is to make sure that an organizational framework exists that ensures the right character, type and form of development is built in the appropriate location.

The organizational framework of the UDO must be intuitive, but it must also be flexible enough to grow with the needs of the city over time. The most effective way to organize the UDO will be in such a way that it instinctively addresses the context of existing and future development patterns. If the UDO addresses context, it will be more adept at connecting the adopted planning and urban design goals to the actual development rules.

The Comprehensive Plan repeatedly calls for contextually appropriate solutions to transportation, streets and



sidewalks, but the Plan does not stress the importance of carrying this idea through the rest of the development standards such as parking, landscaping, block lengths, lot size, and setbacks. Further, the current set of development regulations are not organized by, and do not address, context. Under the current regulatory system, the rules for a R-10 district in an older portion of city (near the downtown core) are identical to rules for a R-10 district in a more recently developed portion of community (in the northern-most portions of the city). In reality, the conditions in the established areas of Raleigh are very different from the newer portions of the city and require a distinct set of rules. Inherently, Raleigh understands this; the city has attempted to fix this problem through a series of patchwork overlay districts such as the Downtown Overlay District and the Pedestrian Business Overlay Districts.



Context areas provide an organizing framework that help to ensure the right type of development in the right place. Once established, each context area would have its own set of zoning districts, street types, block standards, parking provisions and landscaping requirements. This allows for more fine-grained control over the subtle differences between Raleigh's rural fringe, suburban areas, urban neighborhoods and the downtown core. Rather than a set of one-size fits all regulations; a contextually-based UDO would be custom tailored to address the needs of all areas.

There are multiple strategies for how to contextually organize a UDO. Some approaches are more sophisticated than others. Because the contextual approach that Raleigh ultimately chooses will have a ripple effect on various other components of the UDO, it is important that Raleigh clearly understand the intricacies associated with each approach. As such, it is the purpose of this

section to outline the different contextual approaches and identify how each approach might impact the various components of the UDO.

Option 1: Citywide Context Mapping

One method of applying context would be to map the city based on a series of context areas that either today have similar characteristics, or are proposed in the future to have similar characteristics. Context zones could include:

- Natural (areas to preserved);
- Rural (agricultural areas);
- Estate (areas of large lot residential);
- Suburban (areas of single-family detached homes);
- Urban (areas with diverse housing stock);
- Center (mixed use or TOD areas);
- Downtown (most intense portion of the community); and

- Special (industrial, airports and campus areas that don't easily fit into any other context).

The general idea is that each context area has a special and unique character that should be reflected in the standards of the UDO. Thus a commercial area in a suburban context will differ in character from a commercial area in an urban context. Once the context areas are mapped, a series of zoning districts that create the desired land use, scale and built form are assigned and mapped. This approach gives Raleigh the ability to create more precise district standards that are prescriptive in nature and address existing and desired development patterns. Further, because the zoning districts are tailored to the desired character of an area, it will allow greater neighborhood conservation and will create more predictability in the overall system.

Stability vs. Growth

An area of stability is one that is not likely to change substantially in regard to its overall pattern of development, or the current overall density. This does not mean that no new growth occurs in this area. Growth (in the form of redevelopment) is necessary to maintain the vitality of cities. Areas of stability may include both established and new neighborhoods, and may also include neighborhood commercial areas that serve them.

An area of growth is likely to see transformative change. Patterns of development, uses and density or intensity are all likely to change over the planning horizon. This does not mean that every existing use and structure is replaced; however, the overall area is likely to change significantly as development becomes more compact. Areas of growth would include industrial areas converting to mixed use, suburban shopping corridors that become more urban, and transit-oriented development (TOD) sites that intensify in recognition of their location on key transit corridors. Some existing neighborhoods and neighborhood commercial areas may be proposed to become areas of growth.

Option 2: Stability/Growth Area Mapping

A more simplified context approach is to delineate two types of context areas: 1) areas of stability, where little change is anticipated or even desired; and 2) areas of growth, where significant change is anticipated in the future. The city may determine that areas of growth are the designated City Growth Centers and Multi-Modal and Urban Corridors, while areas of stability may be the remaining neighborhood wedges of the city.

Once these areas have been determined, zoning districts can be applied, and rules developed that address the specific needs of each area. For instance, areas of growth may need a full palette of mixed use districts with varying intensities that address the scale and size of the designated Growth Center (Downtown Regional Center, City Growth Center, or Mixed Use Community Center). The rules for areas of stability may be more focused on ensuring new development is compatible with the established neighborhood character.

Option 3: Urban-Suburban Mapping

Taking cues from the Comprehensive Plan's call to enable a more sustainable, mixed use and pedestrian-friendly

city, the Urban-Suburban context approach establishes areas in the city where suburban development patterns are not appropriate. This approach would apply primarily to nonresidential areas, but could also apply to residential portions of the city. As with the previous approach, the Urban-Suburban approach could use the Growth Framework Map to establish a hierarchy of size and intensity for designated urban areas. The Urban-Suburban approach is also a more simplified approach in that it draws a distinction between two portions of the city, urban and suburban, and provides context within these areas through an assortment of zoning districts and development standards applicable in each context.

The city could use principles established in the Comprehensive Plan to map areas within the city where an auto-oriented suburban form of development would not be tolerated today or in the future. Suburban areas should be located where the existing pattern is already suburban and it is not feasible or desirable to change this pattern in the near future. Such areas may include existing suburban neighborhoods, auto-dominated commercial corridors, and areas where urban development may not be desirable or economically feasible.

Urban vs. Suburban

An urban pattern of development is characterized by highly interconnected streets that create short, walkable blocks. Blocks are comprised of buildings brought up towards the street, without substantial parking between the building and street. Streets are often narrow, with on-street parking and street trees. Alleys are often part of the roadway network, and cul-de-sacs are rare. Landscaping is predominately found in the public realm (along streets).

A suburban pattern of development is characterized by lower connectivity than an urban area. Often development is in the form of pods, rather than a series of blocks. Where blocks exist, they are often much longer than in urban areas, and therefore less walkable. Commercial and multifamily areas are often comprised of buildings set far back on the site, with large parking lots between the building and the street. Streets are often wide, without on-street parking or street trees. Cul-de-sacs are frequent, while alleys are rare. Landscaping is a key element of site design, and includes berms, buffers and parking lot landscaping.

Each context approach has its own merits and constraints and in the months ahead discussions must take place that give the consultant team insight into Raleigh's tolerance towards an approach. We believe that through some modest elaboration of the Future Land Use Map and the Growth Framework Map that any one of the approach options can be successfully incorporated into the UDO.

For a more complete evaluation of all zoning districts see page 98.

Mixed Use Districts

The mixing of uses and building types is one of the primary ways of adding vibrancy to a community. Having one mixed use district in the UDO will not be sufficient to address the complexities of a city the size of Raleigh. As discussed in the previous chapters of this report, there is a need for multiple mixed use districts—each with varying intensities, mixes of uses and building types. The context of an area should drive the selection of the appropriate mixed use district and the appropriate development standards. Some mixed use districts will need to be used in areas where the established pattern is suburban

and auto-dominated, while other mixed use districts will be needed for existing walkable urban areas.

The complexity of the existing development patterns in Raleigh provides an example of how important it is to incorporate context into the UDO. Take for example, the Neighborhood Mixed Use category on the Future Land Use Plan. Generally speaking, the district or districts that will ultimately make up the zoning for this category will be similar in some respects; they may be limited to two stories or three stories, with neighborhood-serving uses, and upper-story residential or live-work units. However, the placement of buildings on the site will vary greatly depending on the surrounding context and settlement patterns. In Raleigh's older urban neighborhoods and in the new, more walkable mixed use nodes, these neighborhood-scale districts may look like traditional main streets with buildings pulled up to the street. However, in and around some of the city's newer neighborhoods on the urban fringe, these neighborhood-scale districts may focus more on promoting connectivity within and between sites, while allowing some amount of parking between the building and the street.

Further, along some of the most heavily auto-dominated corridors, the city may not yet be ready to fully eliminate the suburban shopping center characterized by large parking lots between the building and the street. The city may instead continue to require intensive landscaping to ensure that the visual impact of this type and form of development is minimized.

Regardless of the approach to context, the palette and range of mixed use districts within the UDO is likely to stay the same. The proposed set of mixed use districts are based on scale as it applies to neighborhood-serving, community-serving, and regional-serving mixed use areas. It is important to note that once Raleigh settles on an approach to context, the precise of set of district standards (such as building placement, block size, and parking location) will need to be determined.

Neighborhood Mixed Use

Neighborhood-serving mixed use districts are intended to address the need for small-scale commercial services abutting single-family neighborhoods. At the neighbor-

hood-scale, residential, retail and office uses up to two or three stories in height would be permitted. Typical retail stores would range in size from 800 to 10,000 square feet of ground floor area. Forms which promote the role of the automobile over the pedestrian (uses with drive-thru or drive-in facilities) are not appropriate at this scale. Nonresidential uses should be located within walking distance of the residential neighborhoods they are designated to serve.

Community Mixed Use

Community-serving mixed use districts are intended to address the need to serve both through traffic as well as surrounding neighborhoods, meaning they serve multiple neighborhoods. This category applies to medium-sized shopping centers and larger pedestrian-oriented retail districts. The community-scale mixed use districts differ from neighborhood-serving mixed use districts in that they are higher in intensity with individual users typically occupying up to 70,000 square feet of ground floor area and they provide a wider array of more auto-oriented

uses beyond those that are neighborhood serving. At the community scale, residential, retail and office uses up to five stories in height would be permitted.

Regional Mixed Use

Regional-serving mixed use districts are intended to serve mixed use developments that draw from the entire community or region. With the exception of downtown, the regional mixed use districts accommodate the most intense type and forms of development in the city. At the regional scale, residential, retail and office uses up to twelve stories in height would be permitted. Raleigh has allowed some taller heights outside the downtown area already and may want transit areas to have similar heights. Some consideration should be given to whether additional height beyond 12 stories is needed in Midtown and other select locations such as station areas.

For additional discussion on mixed use see page 9.

Proposed Mixed Use Districts

Scale	Future Land Use Category	Existing District	Proposed Mixed Use District	Intended Purpose	Intensity
NEIGHBORHOOD	Neighborhood Mixed Use	NB, SC, BC, PBOD	Main Street -2, -3	Neighborhood-serving; applied linearly along a block face or at key intersections where active ground floor retail is desired.	Typical footprint size: 800 - 10,000 sq. ft. Max. stories: 2 to 3
	Neighborhood Mixed Use	NB, SC, BC, PBOD	Commercial Mixed Use -2, -3	Neighborhood-serving; where the MS districts are applied to key corridors and retail streets, the MX districts are intended for application across a wider area.	Typical footprint size: 800 - 10,000 sq. ft. Max. stories: 2 to 3
	Office & Residential Mixed Use	NB, SC, BC, RB, PBOD	Office Mixed Use -2, -3	Neighborhood-serving; transition district between neighborhood and mixed use areas, allows primarily office, townhouse and multifamily uses only.	Typical footprint size: 800 - 10,000 sq. ft. Max. stories: 2 to 3
COMMUNITY	Community Mixed Use	SC, BUS, TD, PBOD	Main Street -5	Community-serving; applied linearly along a block face or at key intersections where active ground floor retail is desired.	Typical footprint size: < 70,000 sq. ft. Max. stories: 5
	Community Mixed Use	SC, O&I-1, O&I-2, O&I-3, BUS, TD, PBOD	Commercial Mixed Use -5	Community-serving; where the MS districts are applied to key corridors and retail streets, the MX districts are intended for application across a wider area.	Typical footprint size: < 70,000 sq. ft. Max. stories: 5
	Community Mixed Use, Medium Density Residential	NEW	Residential Mixed Use -5	Community-serving; intended for high intensity residential uses with limited ground-floor commercial activity permitted within 100 feet of key intersections.	Typical footprint size: 800 - 5,000 sq. ft. Max. stories: 5
	Community Mixed Use, Office/Research and Development	SC, O&I-1, O&I-2, BUS, PBOD	Office Mixed Use -5	Intended for high intensity mixed use areas where office and employment are the dominant uses. Allows multifamily residential and limited commercial services.	Typical footprint size: < 70,000 sq. ft. Max. stories: 5
	Community Mixed Use, Office/Research and Development, Business & Commercial Services	IND-1, PBOD, DOD	Industrial Mixed Use -5	Intended for high intensity mixed use areas where light industrial and light manufacturing uses are the dominant land use. Allows multifamily residential and limited commercial services.	Typical footprint size: < 70,000 sq. ft. Max. stories: 5
REGIONAL	Regional Mixed Use, Business and Commercial Services	SC, BUS, TD, PBOD	Main Street -8, -12	Regional-serving; applied linearly along a block face or at key intersections where active ground floor retail is desired.	Accommodates footprints above 70,000 sq. ft. Max. stories: 8 to 12
	Regional Mixed Use, Business and Commercial Services	SC, O&I-1, O&I-2, O&I-3, BUS, PBOD	Commercial Mixed Use -8, -12	Regional-serving; where the MS districts are applied to key corridors and retail streets, the MX districts are intended for application across a wider area.	Accommodates footprints above 70,000 sq. ft. Max. stories: 8 to 12
	Regional Mixed Use, Business and Commercial Services, High Density Residential	NEW	Residential Mixed Use -8, -12	Regional-serving; intended for high intensity residential uses with limited ground-floor commercial activity permitted within 100 feet of key intersections.	Accommodates footprints above 70,000 sq. ft. Max. stories: 8 to 12
	Regional Mixed Use, Office/Research and Development	SC, O&I-1, O&I-2, O&I-3, BUS, PBOD	Office Mixed Use -8, -12	Intended for higher intensity mixed use areas where office and employment are the dominant uses. Allows multifamily residential and limited commercial services.	Accommodates footprints above 70,000 sq. ft. Max. stories: 8 to 12
	Regional Mixed Use, Business and Commercial Services, Office/Research and Development	IND-1, PBOD, DOD	Industrial Mixed Use -8, -12	Intended for higher intensity mixed use areas where light industrial and light manufacturing uses are the dominant land use. Allows multifamily residential and limited commercial services.	Accommodates footprints above 70,000 sq. ft. Max. stories: 8 to 12

Downtown Districts

Raleigh understands the importance of downtown as the city's cultural anchor and employment hub. Downtown is the heart and soul of the city and serves as the economic engine of the region. The current district structure downtown is a mess and the Comprehensive Plan calls for the UDO to replace the jumbled mix of base and overlay zoning districts with a cohesive set of rules developed specifically for downtown. The current regulations create a system of multiple base districts, each with a set of per-

mitted uses and site dimensional standards. These base districts are then further regulated through the application of at least one, if not two, overlay districts each with additional and sometime conflicting regulations.

Downtown should function as an expansion of the proposed hierarchy system of mixed use districts. Downtown serves as most intense, mixed use, pedestrian-friendly, and urban portion of the community. It therefore makes

sense to assume that downtown accommodate the most intense mixed use districts in the city. A proposed set of downtown mixed districts is shown in the table below. As proposed, the set of districts would permit a variety of buildings and intensities ranging from three-story townhouses at the edge of downtown up to 40-story mixed use buildings at the core.

For additional discussion on downtown see page 13.

Proposed Downtown Districts

Scale	Future Land Use Category	Existing District	Proposed Downtown District	Intended Purpose	Intensity
DOWNTOWN	Central Business District, Transition Area	DOD, PBOD	Multi-unit -3	Residential transition district between lower intensity neighborhoods and higher intensity downtown mixed use districts, allows single-family, townhouse and multifamily uses only.	Typical footprint size: n/a Max. stories: 3
	Central Business District, Transition Area	DOD, PBOD	Commercial Mixed Use -3	Transition district between lower intensity neighborhoods and higher intensity downtown mixed use districts, allows a variety of pedestrian-scaled retail, office, townhouse and multifamily uses.	Typical footprint size: 800 - 10,000 sq. ft. Max. stories: 3
	Central Business District, Transition Area	DOD, PBOD	Office Mixed Use -3	Transition district between lower intensity neighborhoods and higher intensity downtown mixed use districts, allows primarily office, townhouse and multifamily uses only.	Typical footprint size: 800 - 10,000 sq. ft. Max. stories: 3
	Central Business District, Priority Retail Streets, Secondary Retail Streets	DOD, PBOD	Main Street -5, -8, -12 -20, -40	Applied linearly along a downtown block face or at key downtown intersections where active ground floor retail is desired.	Typical footprint size: n/a Max. stories: 5, 8, 12, 20, 40
	Central Business District	DOD, PBOD	Commercial Mixed Use -5, -8, -12 -20, -40	Where the MS districts are applied to key corridors and retail streets, the MX districts are intended for application across a wider area downtown.	Typical footprint size: n/a Max. stories: 5, 8, 12, 20, 40

Residential Districts

The residential districts make up the majority of the land area of the city; the wedges between the nodes and corridors. For the most part, the residential districts contain the city's most stable neighborhoods. For that reason, the proposed set of residential districts are not likely to change significantly (see table on following page). As proposed, the low-intensity residential districts (RR thru R-6 including MH) remain the same, differentiated from each other based on the maximum number of residential units allowed per acre. The lower-intensity districts, however, could include provisions that allow for moderate intensification of existing residential neighborhoods, such as allowing duplexes on corner lots and allowing accessory dwelling units either by-right or through a special use process.

Except for the R-10 district, the proposed mid- to high-density residential districts focus more on the form and type of development allowed as opposed to the maximum number of permitted dwelling units on a site. Density limits are controlled through a combination of requirements including maximum height, building setbacks, required parking, on-site stormwater retention and

maximum lot coverage. These districts very intentionally focus less on the number of units on a site and instead focus on built form. The Residential Mixed Use districts include provisions that allow for limited commercial uses at key intersections subject to additional use and form standards.

New Residential Standards

By traveling from the center of Raleigh towards the edge of the city, development patterns clearly change over time. How neighborhoods were platted, the size, shape and placement of houses and streets were constructed. The UDO must recognize and respond to this evolution of the built environment. As such, a distinction must be made between the rules for new residential development and the rules for established residential neighborhoods.

Infill Subdivisions

Currently, achieving the Comprehensive Plan's desire to promote infill and redevelopment is very difficult. Projects that enhance the Plan's vision by filling in the gaps in already developed areas should be the easiest to approve, and projects that don't should be the hardest to approve.

Raleigh's current approach to approving infill subdivisions is serving as a disincentive to infill and redevelopment. The fear of lot splits and projects that are contrary to the character of established neighborhoods have resulted in a system that adds complexity and time to the redevelopment process. The UDO must seek to level the playing field for developing inside the city by:

- Eliminating the additional procedural hurdles;
- Ensuring the right rules exist in the right place (context); and
- Developing standards that ensure acceptable transitions occur between commercial and residential areas and higher density to lower density areas.

Contextual Infill

Many communities are ensuring basic compatibility between infill development and the established character of existing single-family neighborhoods by applying a series of contextual infill standards. These standards often ensure compatibility of certain features such as setbacks, massing, bulk, height, impervious surface, and garage placement.

Proposed Residential Districts

Scale	Future Land Use Category	Existing District	Proposed Residential District	Intended Purpose	Intensity
LOW	Rural Residential	RR	RR	Very low density single-family detached houses on individual lots with an allowance for accessory dwelling units.	Max density: 1 du/acre Max. stories: 3
	Low Density Residential	R-2	R-2	Low density single-family detached houses on individual lots with an allowance for accessory dwelling units.	Max density: 2 du/acre Max. stories: 3
	Low Density Residential	R-4	R-4	Low density single-family detached houses on individual lots with an allowance for accessory dwelling units.	Max density: 4 du/acre Max. stories: 3
	Low Density Residential, Moderate Density Residential	R-6	R-6	Provide for a variety of housing opportunities at low to moderate densities (single-family, duplex, townhouse, garden apartment, accessory dwelling units).	Max density: 6 du/acre Max. stories: 3
	Low Density Residential, Moderate Density Residential	MH	MH	Ensure a suitable living environment in manufactured home parks and to ensure the compatibility of such developments with adjacent property.	Max density: 6 du/acre Max. stories: 3
MEDIUM	Neighborhood Mixed Use Moderate Density Residential	R-10	R-10	Provide for a variety of housing opportunities at moderate densities (single-family, duplex, townhouse, garden apartment, accessory dwelling units).	Max density: 10 du/acre Max. stories: 3
	Community Mixed Use, Medium Density Residential	R-15, R-20	Multi-unit -3	Provide for a variety of housing opportunities at medium densities (single-family, duplex, townhouse, garden apartment, accessory dwelling units).	Max density: n/a Max. stories: 3
	Community Mixed Use, Regional Mixed Use, High Density Residential	R-30	Multi-unit -5	Provide for a variety of housing opportunities at high densities (townhouse, garden apartment, apartment).	Max density: n/a Max. stories: 5
	Community Mixed Use, Regional Mixed Use, High Density Residential	NEW	Residential Mixed Use -5	Provide for a variety of housing opportunities at high densities (townhouse, garden apartment, apartment). Limited ground-floor commercial activity permitted within 100 feet of key intersections.	Max density: n/a Max. stories: 5
HIGH	Regional Mixed Use, High Density Residential	NEW	Multi-unit -8, -12	Provide for multifamily housing opportunities at high densities.	Max density: n/a Max. stories: 8/12
	Regional Mixed Use, High Density Residential	NEW	Residential Mixed Use -8, -12	Provide for multifamily housing opportunities at high densities. Limited ground-floor commercial activity permitted within 100 feet of key intersections.	Max density: n/a Max. stories: 8/12

Clear and quantifiable infill standards can be approved administratively. In areas where the regulated setback area differs from the established setback for the area, infill development may be required to build within the range of existing setbacks. Contextual infill standards may require new houses to be built with rear-or alley-loaded garages if the majority of existing homes on the block face also contain rear- or alley-loaded garages.

To limit any potential new standards to infill settings, some communities have established an applicably trigger such as all subdivisions platted prior to a certain date.

Cluster Subdivisions

An option to cluster and develop on smaller lots in trade for additional common open space should be allowed by-right in all low-density residential districts (RR to R-6). Enhanced standards would need to be prepared to ensure that all common open space is usable and is fully integrated into the design of the subdivision. To encourage cluster subdivisions, additional density could be provided for developments that choose to cluster and preserve additional open space.

Residential Transitions

Transitions between a variety of land uses in Raleigh continue to frustrate both developers and neighbors. The current regulations do not provide adequate standards to ensure transitions occur in a mutually agreed-upon fashion. The UDO must resolve these issues. This will require additional time with the affected parties discussing a variety of transitions and possible tools. Raleigh needs to engage the community in discussing the various types of transitions, with a view to providing standardized solutions to the extent feasible. A series of facilitated visual workshops focused on the variety of options and techniques for making successful transitions should occur in an effort to code acceptable transitions, and reduce the continual tension over these issues evident in the present system. Additionally, a consistent method of describing various contexts, as a starting point for discussing compatibility, is lacking.

For additional discussion on residential and neighborhood issues see page 23 and page 57.

Special Districts

The majority of the innovation resulting in major shifts in how Raleigh reshapes itself will take place in the mixed use and downtown districts. It is important that the UDO have a solid set of conventional zoning districts that deal effectively with a variety special areas and uses. Such areas and places include conservation and agriculture areas, large institutions (hospitals, colleges and universities), places of workshops, schools, industrial areas, the airport and areas of historic significance. A proposed palette of special districts is shown on the following page.

For additional discussion on planned developments see page 28, for natural resource protection see page 33, for industrial areas and campus settings see page 51, and for residential mass and scale issues see page 57.

Proposed Special Districts

Type	Future Land Use Category	Existing District	Proposed Special District	Intended Purpose
OPEN SPACE	Public Parks and Open Space, Private Open Space, Critical Area	Conservation Management	Conservation Management	Protect and conserve park lands, wilderness areas, open space, scenic or historic areas, trees and other plants, steep slopes, floodplains, watersheds, and water supplies, fish and wildlife.
	Not addressed	Agricultural Productive	Agricultural Productive	Protect and preserve agriculture land. Reserve lands for future development pending proper timing and economical provision of utilities and facilities to ensure compact development.
COMMUNITY	Public Facilities, Institutional	NEW	Campus	Accommodate office, research and development, residential, light manufacturing and processing uses and other campus-like developments, such as hospitals, colleges and universities.
	Public Facilities, Institutional, Public Parks and Open Space, Private Open Space	NEW	Civic	Provide for public and civic uses that do not readily assimilate into residential or commercial neighborhoods. Also intended to accommodate the active and recreational parkland.
INDUSTRIAL	Business and Commercial Services, Office/Research and Development	Industrial -1, -2	Light industrial	Accommodate a variety of office, light manufacturing, research and development, warehousing, wholesale, processing and commercial uses.
	General Industrial	Industrial -1, -2	Heavy industrial	Accommodate high-impact manufacturing, industrial or other uses, including extractive and waste-related uses, that by their nature create some nuisance.
OVERLAYS	n/a	Planned Development Conditional Use Overlay District	Planned Development	Intended as tool to allow creative and imaginative design that a higher quality of development than would be possible under a single base zoning district or combination of base zoning districts.
	n/a	Airport Overlay	Airport Overlay	Protects the efficiency and long term usefulness of area aviation facilities, highways, arterials, and major streets.
	n/a	Historic Overlay	Historic Overlay	Preserves and protects certain areas, structures, buildings, and objects within the city that are considered to be a valued and important assets.
	n/a	Neighborhood Conservation Overlay	Needs further discussion	Preserves and enhances the quality and appearance of older neighborhoods through the regulation of street design, greenways, rights-of-way and built environmental characteristics.
	Critical Area	Reservoir Watershed Protection Area Overlay	Reservoir Watershed Protection Area Overlay	Protects the integrity of drinking water so as to provide clean and safe water for residents, businesses, industries, plant and animal life at a reasonable cost.
	Critical Area	Urban Water Supply Watershed Protection Area	Urban Water Supply Watershed Protection Area	Protects the quality of water in urban areas.
	n/a	Metro-Park Protection Overlay	Metro-Park Protection Overlay	Limits heights an impervious surfaces adjacent to metro park.
	n/a	SHOD-1	SHOD-1	Requires a 50-foot landscape protective yard adjacent to the street right-of-way. Also limits height to five stories.
	n/a	SHOD-2	SHOD-1	Requires a 25-foot landscape protective yard adjacent to the street right-of-way.

Mapping

Once new text has been drafted, reviewed and adopted, the city will have to face the prospect of applying new districts on the ground. There are several options when it comes to preparing a revised zoning map. At least three elements should be considered: existing conditions such as land use, lot size, building scale and form; current zoning; and the Comprehensive Plan's future land use recommendations. Mapping may occur in one or a combination of the methods shown below.

Conversion Table

The simplest mechanism is to revise existing districts that are already mapped, and continue to use their current delineated boundaries. Another simple approach is to convert existing districts to new districts—without changes to the delineated boundaries of the districts. This is the equivalent of renaming existing districts. A conversion table can be used to combine existing districts as needed.

City-Wide Remapping

At the opposite end of the spectrum is a city-wide remapping, in which every lot and parcel would be reconsidered and replacement zoning applied. Boundaries of districts might change in this approach, but it likely ensures the best fit between new districts and existing and proposed

land use and development patterns. Rezoning of individual parcels requires detailed notice; however, large-scale rezoning changes have a reduced notice burden—normally focused on publication only, without certified letters, posting of properties, or other similar mechanisms.

Hybrid Mapping/Conversion

The most likely outcome is some hybrid of the two approaches described above. Many districts will not change their boundaries, and these can be “converted,” while other areas—especially the industrial areas being designated for mixed use—will require re-mapping. This remapping may include both district changes and boundary changes.

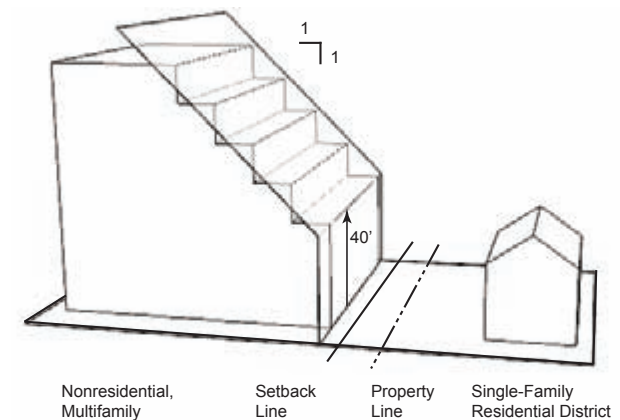
Post Adoption Mapping

Some communities add new districts to their development regulations, but apply them only at developer request, or through implementation of small area plans. This incremental approach allows a very sophisticated solution to emerge over time; however, the impact immediately upon adoption of the UDO will be less apparent.

Height

Raleigh's approach to regulating height is unusual. In most districts, buildings and structures may be con-

structed to any height. However, buildings and structures over 40 feet in height must set back one additional foot for every foot over 40 feet. In most districts 40 feet is the height limit that triggers this additional setback. In some districts such as the Shopping Center District that number is set slightly higher at 50 feet. This approach to height favors large landholders whose only limit on height is how much land they can assemble. This approach promotes “towers in the park,” which is fundamentally a suburban development pattern, pushing taller buildings further in on a site. The city should consider an alternative approach that sets a maximum height limit regardless of how big the site is. A one to one height plane should be maintained for sites that abut single-family residential districts.



Form

Not a Citywide Form-Based Code

Form-based codes are an innovative coding tool that focus primarily on regulating the physical form of the built environment, as opposed to the use of property. Approaches to form-based coding vary depending on the desires and diverse needs of a community. While we anticipate incorporating form-based elements in the UDO, we do not anticipate the final code being anything close to a citywide form-based code. It is rare that a city the size of Raleigh would develop a code that is a true citywide form-based code.

Form-based codes are intended to implement a physical vision or plan for a specified area. The first step to developing a form-based code is to prepare a physical plan for an area that specifies the relationship between buildings and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks. Following determination and specification of the items above, a form-based code for an area can be prepared. Raleigh cannot afford the time or cost of such an approach across the entire city.

Alternative Approaches to Embedding Form into the UDO

As part of the drafting process, elements of form will be incorporated into the UDO in the following ways.

Context

Addressing context will embed elements of form into the UDO, albeit at a very broad scale. Acknowledging and mapping context essentially means applying different form standards to different portions of the community, helping to ensure that the right rules are applied in the right places. In urban areas, form standards may require buildings to be pulled up to the street and force parking to be located to the rear or side of buildings. In suburban areas, forms may be less restrictive and allow buildings to be set back with parking located between the building the street. The extent to which form-based elements will apply will depend heavily on what approach to context the city ultimately decides to take.

Regulating by Building Types

Conventional zoning does a poor job of regulating the types of buildings that may be built in a given district. The bulk and mass of all types of buildings in a given district are set using the same building envelope (combination of lot coverage, height and setbacks). A building type approach sets bulk, mass and form standards for each building type permitted within the same district. For example, a mixed use district may permit retail and townhouse buildings. In a building type approach, retail uses may be permitted only in retail shopfront buildings, and

What are the Basic Elements of Form?

The basic issues critical to good urban form are fairly constant. Form can control such things as: the alignment of buildings to the street; how close buildings are to sidewalks; the visibility and accessibility of building entrances; minimum and maximum buildings heights; minimum or maximum lot frontage; minimum and maximum amounts of window coverage; physical elements required on buildings (stoops, porches, balconies); and the general use of floors (office, residential, or retail). Form requirements are less concerned with architectural styles and designs than in how buildings shape public spaces.

standards would be developed that define the specific parameters of a shopfront building (large storefront windows, tall first floor). The townhouse would have its own standards that define the specific parameters of a good townhouse (no large storefront windows, lower first floor height, raised ground floor). These specific development standards for each building type ensure that the variety of building types all work well together to create the mixed use area desired.

SAMPLE PALETTE OF BUILDING TYPES FROM THE LOUISIANA LAND USE TOOLKIT.

**Single-Family House**

A building type containing one principal dwelling unit typically located on a single lot with private yards on all four sides.

Attached House

A building type containing two principal dwelling units on a single lot with private yards on all four sides. Each unit has its own external entrance. Units can be located on separate floors, side by side, or back-to-back. Often call a duplex or twinhouse.

Row House

A building type with three or more attached dwelling units consolidated into a single structure. Each unit shares a common side wall or a common floor or ceiling. Units may be stacked vertically, however, no more than one unit is permitted above another unit. Each ground floor unit has its own external street facing entrance.

Apartment

A building type containing three or more dwelling units consolidated into a single structure. An apartment contains internal common walls. Dwelling units within a building may be situated either wholly or partially over or under other dwelling units. The building often shares a common entrance. Primary entrances are prominent and street facing.

General

A building type intended for ground floor commercial uses with upper-story residential or offices uses. Windows are provided on the ground floor to encourage interaction between the pedestrian and the ground story space. Primary entrances are prominent and street facing and are spaced at regular intervals along the street edge.

Shopfront

A building type intended primarily for ground floor retail and upper-story residential or offices uses. Large store-front windows are provided to encourage interaction between the pedestrian and the ground story space. Each ground floor unit has a street facing entrance spaced at regular intervals along the street edge.

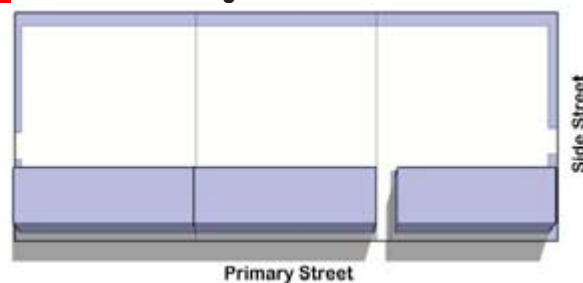
The UDO could contain a full palette of detailed building types each linked to specific zoning districts or uses. Each type is regulated through a detailed regulating graphic that provides standards for key components of each specific building.

Regulating by Frontage Type

Another technique that could help Raleigh address form within the UDO is the inclusion of frontage types. Frontage types link a desired development pattern with specific form requirements that mandate the type of development desired along the street edge. Frontage types are helpful for areas that require a regulatory approach that is more fine-grained than can be applied through a typical base district. Frontage types can be applied over a base zoning district to transform a suburban shopping center into a traditional main street that requires shopfronts pulled up to the street. This allows the community to “paint” the specific vision they have for an area. Frontage types would typically be applied once a detailed area plan has been prepared and the physical character for an area has been determined. Frontages can be applied as zoning map amendments (overlay districts).

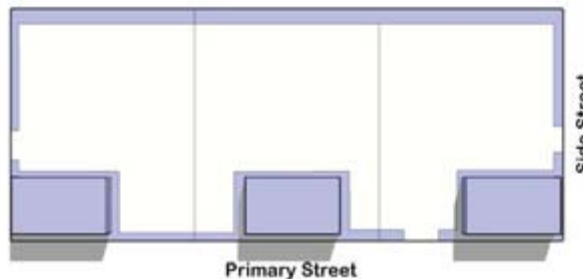
For additional discussion on form-based codes and mixed use places see page 9.

Pedestrian Frontage



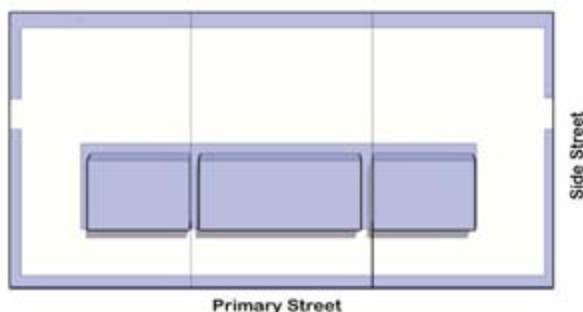
In general, the Pedestrian Frontage should be used where the highest level of walkability is desired. Buildings abut the street and sidewalk, creating a “main street” like environment. There is no on-site parking between the building and the street. On-site parking areas are located to the rear of buildings. Entrances are prominent and street facing. There often are two entrances, a pedestrian entrance facing the street and an ancillary automobile entrance facing the rear.

Urban Frontage



In general, the Urban Frontage should be used where a moderate level of walkability is desired. Buildings still abut the street and sidewalk but with greater spacing in between to balance the needs of both the pedestrian and automobile. There is no on-site parking between the building and the street. However, parking areas can be located to the side and rear of buildings. Entrances are still prominent and street facing. There is often a single entrance at the corner of the building facing that serves as both a entrance for customers arriving by foot and for customers arriving by automobile.

General Frontage



In general, the General Frontage should be used where easy access to buildings by automobile is still desired but where some level of walkability is still maintained. The General Frontage is intended to accommodate development where the land-use pattern is predominately urban in character or where such a land use pattern is desired in the future. Buildings are set back further from the street. Parking occurs in front of buildings but is limited to one row of parking parallel to the street, a one-way drive aisle and angled parking closest to the building. There is usually a single entrance facing the primary street served by an internal sidewalk.

EXAMPLE SET OF FRONTAGE TYPES FROM THE PROPOSE MEMPHIS UNIFIED DEVELOPMENT CODE.

Transportation, Connectivity and Mobility

Zoning, subdivision regulations, and the built environment are intrinsically linked to transportation and the street and sidewalk system. As such, a great deal of work remains to be done in determining the precise standards needed to create a high quality public realm in Raleigh.

Streets

Currently, the city regulates street design through a separate manual, the Streets, Sidewalks, and Driveway Access Handbook. First and foremost, the standards in the Handbook should be incorporated into the UDO.

The Comprehensive Plan specifically calls for the preparation of new street standards that address all modes of travel. In preparation of the UDO, a new set of “context-sensitive” street cross-sections will be developed that address the character and context of adjacent land use.

The width of travel lanes should be adjusted based on the speed of traffic and the level of pedestrian activity desired. Sidewalk availability and width should vary between urban, suburban and rural settings. Street trees should be incorporated in all street cross-sections. On-street

parking should be accommodated in urban settings and where supported by retail demand or pedestrian activity. Bicycle lanes should be considered based on bike travel demand and the 2009 Raleigh Bike Plan.

Streetscapes

Since new street cross-sections will only affect the construction of new roadways, it is important to have requirements for streetscape improvements for redevelopment along existing roadways. The UDO will contain a variety of streetscape standards that could be linked to zoning districts or street frontages.

The precise street and streetscape standards will take extended deliberation between staff, the Administrative Working Group and the consultant team before being finalized. Additionally, consultation with Raleigh’s gas, electric, telephone and cable providers will be required to ensure agreement on location of utility lines within established right-of-way configurations.

Blocks

The Comprehensive Plan suggests using a system of links and nodes to create a ratio which can be used to measure the connectivity of existing and proposed

developments. While this system can contribute to the analysis of existing and proposed projects, a more straightforward approach may be preferred for regulating connectivity.

The approach that has been used in many communities and that should be pursued in the UDO is the promotion of connectivity by regulating the maximum length of block faces and block perimeters. This regulation links context and districts with varying distances so that areas in need of more connectivity (urban areas) can be addressed separately from areas where longer block faces may be permissible (suburban areas).

For additional discussion on transportation and mobility issues see page 41.

Layout and Format

Have you read the Raleigh development regulations (Part 10)? Not cover to cover, but maybe a look to answer a basic question, such as “What could be built on that vacant lot across the street?” or “Am I allowed to construct a rear addition on my house?” What you probably found was one tough read.

Development regulations should be predictable, understandable and easy to use. In fact, one of the recurring themes of the stakeholder input was how difficult it is for the average resident to use and understand the current regulations. Even those who administer the regulations each day are sometimes left scratching their heads over the meaning of some provisions. Given the important role development regulations play in shaping the city, the regulations should be logically organized, well-formatted, and easy to use. In short, development regulations aren’t effective if people don’t understand them.

Plain Language

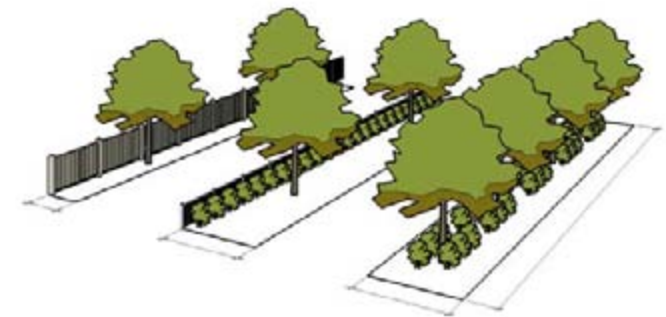
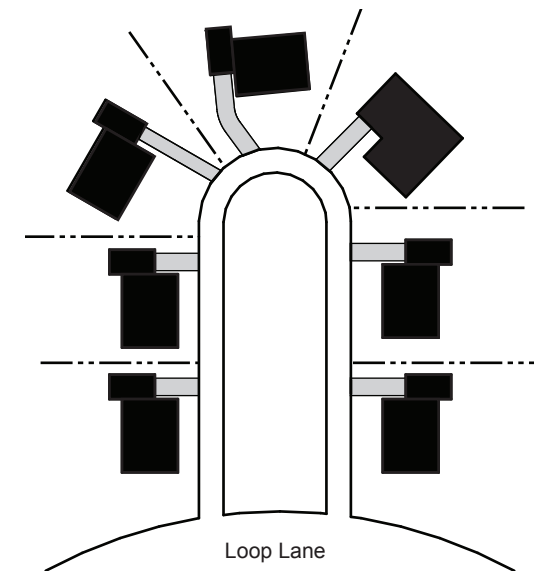
The UDO should strive to be as easily understood as possible. This means the use of plain language in the various provisions. Any excessively “lawyered” provisions, including legal terms of art such as “herein” or “therefor”

should be written out of the UDO. This is not to suggest that a legally-defensible code is not critical, but even the federal government has moved to require plain language drafting.

The use of *italics* to denote a defined term may be helpful for power users of the code, but to the average user, the embedded italics make the sentences harder to read. Another minor irritant to readers is the duplication of numbers in both text form and numeric form, for example “twenty-four (24) inches.” Both should be eliminated in favor of the casual reader.

Digital Enhancements

The UDO should take advantage of advances in document technology such as digital cross-references, tables of contents and index, allowing the user to click on a page number or cross-reference and jump to that section. Additionally, document navigation techniques such as thumbnails embedded in Adobe PDF documents can be useful. These digital enhancements are often just a “save as” away from the original document. Digital enhancements can also include internal interpretations embedded as comments, legislative history (including links to



WHERE POSSIBLE, GRAPHICS SHOULD BE USED TO VISUALLY ILLUSTRATE CODE REQUIREMENTS.

prior versions), and external links to items such as state statutes, external manuals and other helpful materials.

Page Layout

Other “easy-find” features include a running header that allows the reader to quickly flip through pages of the code (think of a dictionary or yellow pages directory). Annotation of each page with a date of publication or adoption in the footer is also important to reassuring customers they have the most current copy of the document. And while most users reasonably assume the on-line copy is the most up-to-date, that may not be true due to the time lag often associated with codification.

The city has already added some user-friendly features. A series of inserts summarize key elements such as use and dimensional standards.

Development regulations don’t have to read like a novel, but they do need to be easy-to-use reference be laid out so that people can intuitively find the information they need.

Software

The selection of software for drafting the UDO has significant implications for the visual quality of the end

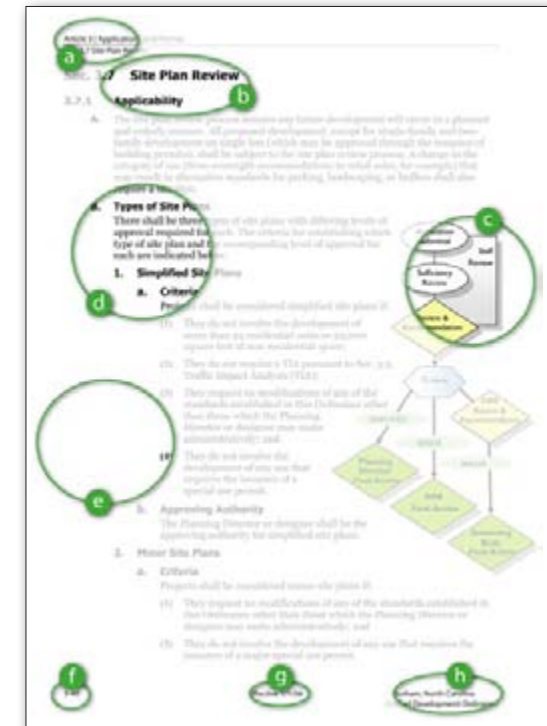
product. While many communities continue to use word-processing software (MS-Word, for example), other communities have turned to the flexibility of page layout software such as Adobe’s InDesign. The current version of InDesign is not only capable of all of the typical word processing functions such as tables of contents, cross-references and spell-checking, it is also highly adept at the incorporation of graphics, and allows the consultant team to separate the document into chapters that can all be consolidated into a single “book.” Traditional word processing software provides nowhere near the control of elements on a page such as graphics that page layout software provides.

However, the implications of using InDesign are that the city would continue to manage future code revisions using InDesign as well. We believe this is a trade-off worth making, in order to provide a higher quality of document.

Tables

The existing development regulations make limited use of tables and graphics. As they say—“a picture is worth a thousand words.” While we are not suggesting the city eliminate the words, supplementing them with images and tables makes access to the information more intuiti-

CONTEMPORARY PAGE LAYOUT



a RUNNING HEADER

b PROMINENT TITLES

c GRAPHICS AND ILLUSTRATIONS

d CONSISTENT NUMBERING, INDENTED PARAGRAPHS

e GENEROUS USE OF WHITE SPACE

f PAGE NUMBERS

g ADOPTION DATE

h DOCUMENT TITLE

RALEIGH SHOULD TAKE ADVANTAGE OF DIGITAL TECHNOLOGY TO ENSURE THE UDO BROADCASTS THE TYPE AND QUALITY THE CITY EXPECTS TO SEE.

Article 5. Urban Neighborhood Context
Division 5.3 Design Standards

E. Row House (Residential)

5-24 | **FINAL PUBLIC REVIEW DRAFT**
January 20, 2010

City and County of Denver
Chapter 59: Zoning Code

Article 5. Urban Neighborhood Context
Division 5.3 Design Standards

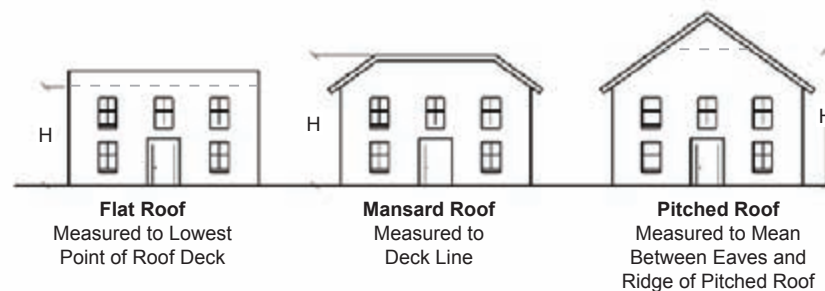
ROW HOUSE (RESIDENTIAL)

	U-TU-B1*	U-RH-2.5	U-RH-3A
HEIGHT			
A Stories (max)	2.5	2.5	2.5
F Feet, pitched or flat roof, front 65% of lot (max)	35'	35'	35'
F Feet, pitched or flat roof, rear 35% of lot (max)	35'	19'	19'
B Wall Plate Height (max)	25'	25'	25'
SITING			
ZONE LOT			
Zone Lot Size (min)	6,000 sf	6,000 sf	6,000 sf
Zone Lot Size (max)	9,375 sf	na	na
Dwelling Units per Primary Structure (min/max)	3/na	3/10	3/10
SETBACKS			
C Primary Street, block sensitive setback required (see Sec. 13.1.1.3)	yes	yes	yes
Primary Street where block sensitive setback does not apply	20'	20'	20'
D Side Street (min)	5'	5'	5'
E Side Interior (min)	5'	5'	5'
F Rear, alley/no alley (min)	12'/20'	12'/20'	12'/20'
PARKING			
Surface Parking Location	Not allowed between building and Primary Street		
Vehicle Access	From alley; or from street when no alley present. See Sec. 5.3.6		
ACCESSORY STRUCTURES			
G Detached Accessory Structures Allowed	See Sec. 5.3.4		
DESIGN ELEMENTS			
BUILDING CONFIGURATION			
H Upper Story Setback, for Flat Roof, Above 25' Primary Street and Side Interior	10'	10'	10'
I Street-facing attached garage door width per Primary Structure	20'	20'	20'
GROUND STORY ACTIVATION			
J Required Entrance, Primary Street	Each dwelling unit shall have a ground story street-facing entrance.		

*Form is permitted ONLY on corner zone lots where at least one of the intersecting streets is a collector or arterial street, according to the functional street classification adopted by the Public Works Department.

5-25 | **FINAL PUBLIC REVIEW DRAFT**
January 20, 2010

City and County of Denver
Chapter 59: Zoning Code



SAMPLE GRAPHIC THAT CLEARLY DEFINES HOW TO MEASURE HEIGHT.

tive for more people. Remember—the target of the code is design professionals as well as lawyers.

Tables are most useful when a comparison of standards is helpful—for example, a series of districts with varying minimum lot areas can be portrayed in a single table, allowing a developer to seek the correct zoning district for the kind of development desired. Tables are also important for standards such as allowed uses. By including the uses in a matrix form, consistency across districts is easier to maintain, and the chance of errors of omission that might occur during future amendments is reduced. The city's current approach—summarizing uses in the district, as well as creating a matrix—is likely to lead to inaccuracies over time. We do not recommend this kind of duplication in the UDO.

Graphics

Graphics are most helpful for illustrating standards, especially those related to building form. Raleigh has a variety of creative tools (such as the measurement of height) that are excellent examples where graphics would be useful.

Additional graphics would make other portions of the development regulations easier to understand. Simple flow charts for procedures provide a helpful overview. Illustrations of sign types may rely on photographs of existing examples, while lot layout standards use plan views, and architectural standards use elevations or isometric views.

Where possible, best practice concepts should be used in the illustrations in the UDO as a guide to sound development practices.

Code Availability

Part 10 and all of its related materials should be easily available in a variety of ways. While the growing use of the internet has made digital versions a requirement for any professional, the general public may be more likely to purchase a paper copy available at the city's offices. At minimum, PDF copies of the best original of all documents should be available through the web—and internally for staff as well.

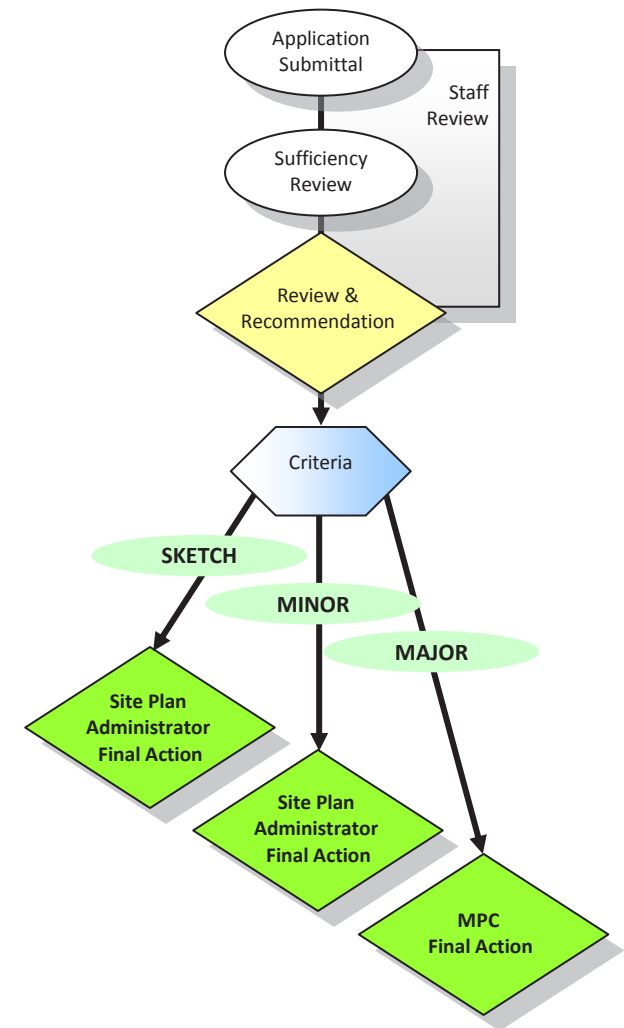
The city's official codifier (Municode) prepares the internet-ready version of Part 10, which means that users must fumble through Municode's awkward interface to get to the necessary materials. And the internet version

does not handle graphics or tables very well. Finally, updates must wait until the Municode has included the new materials in the code—which is at least weeks, and often months after their adoption. While the web site tracks new or revised ordinances, it seems important that an up-to-date copy of any revisions to the development regulations be generally available as quickly after the adoption of changes as possible.

Proposed UDO Outline

The following pages compare the existing Raleigh Part 10 organization to a more ideal model proposed for the UDO. Some key elements of the reorganization:

- Consolidate all review bodies and procedures
- Provide a consolidated chapter on use
- Consolidate definitions at the end of the document
- Eliminate regulatory language from definitions
- Unify zoning and subdivision/site plan elements
- Move Building Code out of the development regulations



SIMPLE FLOW CHARTS FOR PROCEDURES PROVIDE A HELPFUL OVERVIEW.

PROPOSED – PART 10 PLANNING AND DEVELOPMENT

Chapter 1. General Provisions

- A. Short Title
- B. Applicability
- C. Purpose and Authority
- D. Intent
- E. Conflicting Provisions
- F. Plans to be Considered
- G. Severability

Chapter 2. Districts

- A. Districts Established
- B. District Intent Statements
- C. Groupings of Districts
- D. Zoning Map

Chapter 3. District Dimensional Standards

- A. General Provisions/Applicability
- B. Blocks and Lots
- C. Building Types [Optional]
- D. Open Space and Community Districts
- E. Residential Districts
- F. Mixed-Use Districts
- G. Industrial Districts
- H. Planned Development
- I. Frontage Standards [Optional]

Chapter 4. Uses and Use Standards

- A. Permitted Use Table
- B. Use Categories
- C. Use Standards
- D. Temporary Uses
- E. Accessory Structures and Uses

Chapter 5. General Development Standards

- A. General Provisions/Applicability
- B. Streetscape Standards
- C. Street Standards
- D. Access Management
- E. Parking and Loading
- F. Landscaping and Screening
- G. Outdoor Site Lighting
- H. Signs

Chapter 6. Infrastructure and Public Improvements

- A. General Provisions/Applicability
- B. Streets
- C. Utilities
- D. Reservation of Public Land
- E. Public Improvements

Chapter 7. Open Space and Natural Resource Protection

- A. General Provisions/Applicability
- B. Tree Preservation
- C. Open Space
- D. Steep Slope Protection
- E. Stream Buffers
- F. Floodway Protection
- G. Stormwater Management

Chapter 8. Overlay Districts

- A. Airport Overlay District
- B. Historic Overlay District
- C. Neighborhood Conservation Overlay District
- D. Reservoir Watershed Protection Area Overlay District

Chapter 9. Administration

- A. Review Bodies
- B. Review Authority
- C. Common Review Procedures
- D. Comprehensive Plan Amendments
- E. Text Amendment
- F. Zoning Map Change
- G. Special Use Permit
- H. Planned Development Review
- I. Subdivision Review
- J. Rights of Way
- K. Greenway Dedication
- L. Site Plan Review
- M. Special Exception
- N. Temporary Use Review
- O. Tree Removal
- P. Sign Permit
- Q. Common Signage Plan
- R. Certificate of Occupancy
- S. Variance
- T. Appeals
- U. Nonconformities
- V. Enforcement

Chapter 10. Definitions

- A. Word Usage
- B. Abbreviations
- C. Rules of Measurement
- D. Defined Words, Terms, and Phrases

CURRENT – PART 10 PLANNING AND DEVELOPMENT

Chapter 1. General Provisions

- Art. A. Department of Planning
- Art. B. Planning Commission
- Art. C. Appearance Commission
- Art. D. Reserved
- Art. E. Historic Districts Commission
- Art. F. Board of Adjustment

Chapter 2. Zoning

- Art. A. General Provisions
- Art. B. Establishment of Zoning Districts
- Art. C. Summary of Requirements by Zoning District
- Art. D. Use, Residential Density, Setback, Height Regulations and Summary Schedules
- Art. E. Supplementary Regulations and Exceptions – Off-street Parking, Landscaping, Signage, Fences and Walls, and other Regulations
- Art. F. Planned Residential Development Regulations
- Art. G. Planned Nonresidential Development Regulations
- Art. H. Approval Procedures
- Art. I. Appeals Variances, Special Use Permits, Non-Conformities
- Art. J. Enforcement
- Art. K. Official Zoning Map
- Art. L. Fees

Chapter 3. Subdivision/Site Plan

Standards Ordinance

- Art. A. General Provisions
- Art. B. Procedures
- Art. C. Reimbursement and Design Standards for Subdivision Site Plans
- Art. D. Planned Residential Development Regulations
- Art. E. Fees

Chapter 4. Floodprone Area Regulation

Chapter 5. Soil Erosion And Sedimentation Control

Chapter 6. Building and Housing Code Enforcement

- Art. A. Adoption of Regulatory Codes by Reference
- Art. B. Department of Inspections
- Art. C. Enforcement Provisions
- Art. D. Unsafe Buildings
- Art. E. Plumbing Code
- Art. F. Mechanical Examining Board
- Art. G. Electrical Code
- Art. H. Housing Code
- Art. I. Manufactured Homes
- Art. J. Demolition by Neglect of Historic Landmarks and Structures Within Historic Overlay Districts
- Art. K. Nonresidential Building or Structure Code

Chapter 7. Sidewalks and Driveways

Chapter 8. Facility Fees

Chapter 9. Stormwater Control and Watercourse Buffer Regulations

- Art. A. General Provisions
- Art. B. Establishment of Stormwater Control Measures

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10. APPENDIX



District Evaluation

Raleigh's current zoning ordinance (Part 10 Chapter 2. Zoning) is divided into 12 articles (A – L) outlining the rules and regulations from the general authority of the city, to the zoning district requirements, to the general development standards, to the fees associated with the entitlement process.

The zoning ordinance contains 24 base districts, 13 overlay districts and 24 conditional use districts for a total of 61 different zoning designations; not including the multitude of planned unit developments and adopted conditional use districts. The rules for these 61 districts and associated development standards sprawl across more than 400 pages and make up two-thirds of the entirety of Part 10.

Much of the zoning ordinance content is repetitive. For example Article C. Summary of Requirements by Zoning Districts, is the largest article in the chapter. It appears that the intent of this article is to establish and “summarize” the approval criteria, definitions, permitted uses, prohibited uses, district dimensional standards, additional parking standards, required open space, and any other supplementary regulations and standards for district. The

very next article restates most of this same information in a slightly different way. Not to mention the summary tables inserted in the document. It is this lack of organization and repetition that results in a zoning ordinance that is difficult to read, understand, and implement and can easily lead to multiple inconsistencies.

Further, the zoning ordinance simply add on the overlay district standards after the base zoning district standards in Article C. This approach can be confusing to those not familiar with the differences between base zoning and overlay zoning. A better approach would be to give the overlay districts their own article. This will help draw the distinction between the two district types and eliminate some of the confusion.

Districts Needing Further Evaluation

Over time, a combination of overlay districts and conditional use districts have been added to the zoning paradigm as solutions to some very specific problems. The result is that some districts (such as BC) are rarely used, while multiple overlay districts may be used in combination with a base district, creating a tangled web of confusing and potentially conflicting regulations.

In the end, it is not about having too many or too few districts, but about having the right mix of districts, a mix of districts that gives the city the flexibility to adequately address development proposed today, and to funnel future growth into the appropriate development patterns of tomorrow.

The following two tables identify each base and overlay zoning district, summarize the district, and whether it should be retained, combined with another district, or possibly deleted. These tables are intended to inform a discussion and do not necessarily reflect the final outcome of the UDO.

BASE ZONING DISTRICTS				
Current Zoning District	District Abbreviation	District Summary	Keep or Combine	Comments
Agricultural Productive	AP	Protects and preserves land for performance of agriculture; encourages concentration of agriculture uses in areas where friction with urban uses will be minimized; preserve agriculture lands for future development pending proper timing and economical provision of utilities and facilities to ensure compact development.	Keep	
Conservation Management	CM	Protects and conserves park lands, wilderness areas, open space, scenic or historic areas, trees and other plants, steep slopes, flood-plains, watersheds, and water supplies, fish and wildlife.	Keep	
Rural Residential	RR	Rural character is created through restricted AG uses and boarding of animals. Appropriate where lack of infrastructure, environmental concerns, or development patterns limit land uses. 40,000 square foot lots or 80,000 square feet in reservoir watershed protection areas.	Keep	
Residential - 2	R-2	Predominantly residential. Detached residences and attached residences in cluster unit developments of 20 or more acres, up to one unit per 20,000 square feet.	Keep	
Residential - 4	R-4	Predominantly residential. Detached residences and attached residences in cluster unit developments of 20 or more acres, up to 4 units per acre.	Keep	
Special Residential - 6	SP R-6	Predominantly residential. Detached residences, duplexes and other attached residences in cluster unit developments of 10 or more acres, up to 6 units per acre.	Combine	Combine with R-6
Residential - 6	R-6	Predominantly residential. Attached and detached residences, including townhomes, apartment, and congregate care developments, up to 6 units per acre.	Keep	
Manufactured Home	MH	Predominantly residential. Manufactured homes in manufactured home parks and subdivisions.	Keep	
Residential - 10	R-10	Predominantly residential. Attached and detached residences, including townhomes, condominiums, and congregate care developments, up to 10 units per acre. Transient lodging including tourist home, lodging house, guest house, and bed and breakfast permitted.	Keep	
Residential - 15	R-15	Predominantly residential. Attached and detached residences, including townhomes, condominiums, and congregate care developments, up to 15 units per acre. Transient lodging including tourist home, lodging house, guest house, and bed and breakfast permitted.	Combine	Combine in a new mixed residential type district
Residential - 20	R-20	Predominantly residential. Attached and detached residences, including townhomes, condominiums, and congregate care developments, up to 20 units per acre. Transient lodging including tourist home, lodging house, guest house, and bed and breakfast permitted. Fraternities and sororities permitted.	Combine	Combine in a new mixed residential type district
Special Residential - 30	SP R-30	Predominantly residential. Attached and detached residences, including townhomes, condominiums, and congregate care developments, up to 30 units per acre with planning commission approval of a site plan. Appropriate in already developed neighborhoods where high density residential is desired and concern for character requires site plan review, minimum lot size and contextual setbacks.	Combine	Combine in a new mixed residential type district
Residential - 30	R-30	Predominantly residential. Attached and detached residences, including townhomes, condominiums, and congregate care developments, up to 30 units per acre. Transient lodging including tourist home, lodging house, guest house, and bed and breakfast permitted. Fraternities and sororities permitted.	Combine	Combine in a new mixed residential type district

BASE ZONING DISTRICTS				
Current Zoning District	District Abbreviation	District Summary	Keep or Combine	Comments
Residential Business	RB	Residential uses up to 10 units per acre, certain office, and retail supportive and compatible of residences including personal services, food stores, and transient lodging. Used in areas of employment. Regulations restrict outdoor facilities and floor area gross of structures.	Combine	Combined to create a neighborhood scale office mixed use district
Office & Institution - 1	O&I-1	Permits offices, institutions, colleges and schools. Residential up to 15 units per acre as a general use and 25 units per acre with planning commission approval of site plan. Intensity of office regulated by FAR and lot coverage.	Combine	Combined to create community and regional scale office and commercial mixed use districts
Office & Institution - 2	O&I-2	Permits offices, institutions, colleges, schools, hotels or motels. Residential up to 15 units per acre as a general use and 40 units per acre with planning commission approval of site plan. Intensity of office regulated by FAR and lot coverage. More flexible height, setback, parking ratio, FAR and lot coverage.	Combine	Combined to create community and regional scale office and commercial mixed use districts
Office & Institution - 3	O&I-3	Permits offices, colleges, and schools. No residential permitted. Most restrictive height, setback, FAR and lot coverage.	Combine	Combined to create community and regional scale office and commercial mixed use districts
Buffer Commercial	BC	All retail sales, residential up to 10 units per acre, hotels and motels. Restricted outdoor facilities and FAR.	Combine	Combined to create a neighborhood scale office mixed use district
Shopping Center	SC	All retail sales and offices. More flexible yard set backs and under certain conditions permits multiple buildings per lot.	Combine	Combined to create neighborhood, community and regional scale main street, office and commercial mixed use districts
Neighborhood Business	NB	All retail sales, and offices, residential up to 10 units per acre, hotels and motels. Some flexibility in side and rear yard set backs,	Combine	Combined to create neighborhood scale main street, office and commercial mixed use districts
Business	BUS	All retail sales, and offices, residential up to 10 units per acre, hotels and motels. Permits taller buildings allows non-residential buildings to be built to the street.	Combine	Combined to create community and regional scale office and commercial mixed use districts
Thoroughfare District	TD	All retail sales, and offices, residential up to 20 units per acre (40 units per acre with approved site plan), hotels and motels, and general manufacturing. Permits the widest range of uses.	Combine	Combined to create community and regional scale main street and commercial mixed use districts
Industrial - 1	IND-1	All retail, manufacturing, warehousing, hotel or motel, indoor recreation, and landfills permitted. No dwelling units permitted unless in downtown overlay.	Combine	Combined with IND-2 to create a new set of heavy industrial, light industrial, and industrial mixed use districts
Industrial - 2	IND-2	All retail, manufacturing, warehousing, hotel or motel, indoor recreation, and landfills permitted. No dwelling units permitted unless in downtown overlay. Permits zero setbacks.	Combine	Combined with IND-1 to create a new set of heavy industrial, light industrial, and industrial mixed use districts

OVERLAY ZONING DISTRICTS				
Current Zoning District	District Abbreviation	District Summary	Keep, Delete, Combine	Comments
Airport Overlay District	AOD	Protects the efficiency and long term usefulness of area aviation facilities, highways, arterials, and major streets by controlling the type and design of land uses in proximity to such facilities. Protects the public from adverse health effects and annoyance by aircraft noise. Dwellings and similar uses are prohibited in the AOD.	Keep	
Downtown Overlay District	DOD	Promotes the development of intensive residential and nonresidential uses within the downtown area to provide living areas in close proximity to employment, reductions in peak hour commuter congestion, and support for downtown commercial development and redevelopment.	Delete	Updated base districts should eliminate the need for this overlay
Historic Overlay District	HOD	Preserves and protects certain areas, structures, buildings, and objects within the city that are considered to be a valued and important assets and have special significance in terms of history, prehistory, archaeology, architecture or culture and possess integrity of design, setting, materials, feeling and association.	Keep	
Metro-Park Protection Overlay District	MPOD	Preserves and protects the integrity of large natural parks which serve the citizens. The parks are protected from incompatible uses and intensive developments, by the application of impervious surfaces and building height limits near the boundaries of the metro park.	Keep	Needs further discussion
Neighborhood Conservation Overlay District	NCOD	Preserves and enhances the quality and appearance of older neighborhoods through the regulation of street design, greenways, rights-of-way and built environmental characteristics. The NCOD stabilizes and improves property values and promotes local design qualities. The NCOD reduces conflicts between new construction and existing development, and encourages compatible infill development.	Keep	Needs further discussion
Pedestrian Business Overlay District	PBOD	Preserves and enhances the character of pedestrian-oriented retail districts through the application of design standards which encourage pedestrian activity. The PBOD protects the economic viability of the area by respecting and improving the pedestrian environment by reducing conflicts between pedestrian and vehicular traffic and it encouraging compatible development.	Delete	New standards for commercial and mixed use districts should eliminate the need for this overlay
Planned Development Conditional Use Overlay District	PDD	Provides an opportunity to incorporate alternative designs involving a mixture of uses so as to promote transit usage, more usable open space, affordable housing, preserve land for economic base uses, facilitate more economic arrangement of buildings, preserve irreplaceable or significant natural features, protect roadway corridors from strip development, contain innovative architectural elements and design, and provide for community-wide public services and amenities.	Combine	Re-envision to a more general set of standards that address residential, mixed use and non-residential projects
Reservoir Watershed Protection Area Overlay District	WPOD	Protects the integrity of drinking water in Raleigh and surrounding communities, so as to provide clean and safe water for residents, businesses, industries, plant and animal life at a reasonable cost. Regulations include impervious surface limitations and natural resource buffer yards.	Keep	
Urban Water Supply Watershed Protection Area Overlay District	UWSPOD	Protects the quality of water in Raleigh's urban areas, so as to provide clean water for residents, businesses, industries, plant and animal life. Regulations include impervious surface limitations, certain limitations on use and natural resource buffer yards.	Keep	

OVERLAY ZONING DISTRICTS				
Current Zoning District	District Abbreviation	District Summary	Keep, Delete, Combine	Comments
Special Highway Overlay District - 1	SHOD-1	Protects and preserves major access corridors and specified principal arterials which are located now or will be constructed. SHOD-1 lengthens the time during which highways can serve their functions without expansion or relocation by expediting the free flow of traffic and reducing hazards through improved access management and by requiring that buildings and structures be set back from the right-of-way to provide adequate queuing.	Keep	
Special Highway Overlay District - 2	SHOD-2	Protects and preserves major access corridors and specified principal arterials which are located now or will be constructed. SHOD-2 lengthens the time during which highways can serve their functions without expansion or relocation by expediting the free flow of traffic and reducing hazards through improved access management and by requiring that buildings and structures be set back from the right-of-way to provide adequate queuing. In contrast to SHOD-1, SHOD-2 contains no additional height nor site size requirements than the underlying district. SHOD-2 requires narrower yards and less treescape plantings than SHOD-1	Keep	
Special Highway Overlay District - 3	SHOD-3	Protects and preserves major access corridors and specified principal arterials which are located now or will be constructed. SHOD-3 lengthens the time during which highways can serve their functions without expansion or relocation by expediting the free flow of traffic and reducing hazards through improved access management and by requiring that buildings and structures be set back from the right-of-way to provide adequate queuing. In contrast to SHOD-1, SHOD-3 contains no additional height nor site size requirements than the underlying district. In SHOD-3, the yard area is an average dimension.	Delete	Updated landscaping standards and base districts should eliminate the need for this overlay
Special Highway Overlay District - 4	SHOD-4	Protects and preserves major access corridors and specified principal arterials which are located now or will be constructed. SHOD-4 lengthens the time during which highways can serve their functions without expansion or relocation by expediting the free flow of traffic and reducing hazards through improved access management and by requiring that buildings and structures be set back from the right-of-way to provide adequate queuing. In contrast to SHOD-2, SHOD-4 allows reduced setbacks required by the underlying district. SHOD-2 and 4 require narrower yards and less treescape plantings than SHOD-1 and 3	Delete	Updated landscaping standards and base districts should eliminate the need for this overlay
Transit Oriented Development Overlay District	TODOD	Promotes the development of a concentrated mix of pedestrian oriented land uses around a passenger transit station or stop through the application of design standards, land use regulations, incentives and other implementation tools. A development pattern is encouraged that concentrates high density residential development and support services, provides convenient pedestrian and vehicular access, establishes a broad mix of land uses and supports the use of transit.	Delete	Updated base districts and new residential mixed use districts should eliminate the need for this overlay

Comprehensive Plan Review

Action Item Review

Raleigh should be commended for setting a bold vision for the city in the recently adopted 2030 Comprehensive Plan. The Plan sets out a course for future growth and development of the city that is both steeped in sustainability and rich in innovation. This policy document solidifies Raleigh's place at the forefront of cities thinking and talking about innovative urbanism and how to increase quality of life to attract the creative minds that so many cities are competing for.

From our initial review it is clear that one of the primary barriers to implementing the Comprehensive Plan are the current development regulations. Examples of the disconnect between the Plan and the current regulations can be seen by reviewing the single use nature of the palette of available zoning districts and the wide array of overlay districts that have been created to repair them. The Comprehensive Plan consists of six vision themes

1. Economic Prosperity and Equity;
2. Expanding Housing Choices;
3. Managing Our Growth;
4. Coordinating Land Use and Transportation;

5. Greenprint Raleigh – Sustainable Development; and
6. Growing Successful Neighborhoods and Communities.

Each of the Plans 13 elements set forth policy statements tied to the six vision themes and identifies action items that direct the policy statement's implementation.

Economic Prosperity and Equity

Raleigh's development regulations should enable the location and growth of innovate, creative, high-tech and green businesses. By mapping mixed districts permitting the flexible use of space in attractive, walkable, pedestrian-oriented environments, Raleigh will become more attractive to companies looking to take advantage of the city's quality of life, climate, and proximity to research and education.

Expanding Housing Choices

For the past 50 years the majority of new housing supplied in the US has been in the form of detached single-family housing and Raleigh is no different. Raleigh's development regulations are structured in such a way that providing low-density single-family subdivisions is both the most economical and time sensitive method for developers to provide housing. However, in order for

Raleigh to meet the expected demand for affordable and workforce housing the UDO must level the playing field so that providing an attractive and diverse mix of housing types (cottage courts, townhouse) is as cost-effective as single-family homes.

Managing our Growth

Both Raleigh and the greater region are expecting significant growth in the next 20 years. With this growth and additional investment come exciting opportunities but if the adequate planning and rules are not in place this growth could have frightening consequences. The UDO must allow and promote growing Raleigh from the inside out.

Coordinating Land Use and Transportation

The connection between land use and transportation is acknowledged in the Comprehensive Plan. By using a separate policy handbook to govern roadway design, the current regulations do a bad job at connecting land use and transportation. Further the current regulations do not have the tools in place to adequately or easily create high density nodes of mixed-use developments along planned transit corridors.

Greenprint Raleigh – Sustainable Development

As evident from the Comprehensive Plan, Raleigh is ready to move toward a greener future by re-thinking settlement patterns into a more sustainable model. The problem is that the current regulations do not easily allow the qualities that truly sustainable cities have. Qualities like bikeability, walkability, mixing of uses, and appropriate densities,

Growing Successful Neighborhoods and Communities

Great neighborhoods are the building blocks of great cities. As noted above, in order to be successful Raleigh must grow from the inside out. The Comprehensive Plan promotes policies that encourage reinvestment in the city's core but the current regulations were written with a more suburban planning philosophy making it difficult for infill development.

Action Item Review

As for the specific action items within the Comprehensive Plan; of the 450+ action items identified under the 13 elements of the Plan approximately 145 of them are either

expressly prohibited or obstructed by the requirements in the current regulations. The table on the following pages identify the action items in the Plan that are development-related and note whether they are capable of being implemented under the current regulations. The table is laid out as follows:

- The first column specifies the action item.
- The second column provides commentary as to how the current regulations address the specific issue in the action item and in some instances, provide general best practice strategies to implementing the action item.

Plan Action Item	Comment
A. LAND USE	
A.1. FUTURE LAND USES	
A.1.1. Zoning Update: Update the Zoning Ordinance to reflect the Future Land Use Map classifications and associated land use recommendations.	The Coding Approach chapter outlines how the UDO will address the Future Land Use Map classifications and associated land use recommendations.
A.1.2. Zoning Innovations: Study the incorporation of new tools into the Zoning Ordinance, such as Floor Area Ratios to control building bulk, form-based overlays, and performance-based zoning.	Raleigh's current regulations use FAR as a control in select base and overlay districts. Further, the current regulations include some performance measures such as spacing of certain uses, buffers and other impact mitigation measures. The current regulations do not currently apply form-based code approaches. The Coding Approach chapter outlines how the UDO will address innovative zoning techniques.
A.1.3. Special Study Area Plans: Undertake detailed land use planning in those areas designated as Special Study Areas on the Future Land Use Map before approval of development proposals or rezonings in the areas. Engage the public in the planning process.	This action item is not directly a development regulation issue. The results of the studies may trigger future development regulation issues.
A.1.4. FLUM Maintenance and Revision: Maintain the currency of the Future Land Use Map through periodic reevaluation and revision of the map based on analysis of growth and development needs and trends, and small area and special area studies.	This action item is not directly a development regulation issue, although a plan amendment process may be added to the UDO.
A.1.5. Incorporate Adopted Regulations into Zoning: Incorporate all development regulations currently located in adopted plans into the Zoning Ordinance, including the standards from Streetscape and Parking Plans for Pedestrian Business Overlay Districts.	Raleigh currently uses several different regulatory manuals and plans. To the maximum extent possible the regulatory language from these plans should be incorporated into the UDO.
A.1.6. Update Subdivision and Site Plan Regulations: Update the subdivision and site plan regulations to reflect that if there is a conflict between the Comprehensive Plan and the Zoning Code, the Zoning Code shall apply.	Add language to the UDO.
A.2. CITY-WIDE GROWTH	
A.2.1. Future Studies in High-Density Areas: As necessary, undertake detailed studies and plans for growth centers, mixed-use centers, and transit station areas (rail or bus transfer nodes) to identify areas appropriate for higher-density mixed-use development.	Raleigh's current regulations do not provide sufficient tools to appropriately implement this action item. The UDO will consider tools for higher density mixed use development.
A.2.2. Zoning for Smarter Growth: During the update of the development regulations, consider changes to existing zoning districts or the creation of new districts that will result in development patterns that implement the city's land use policies for more walkable, transit supportive, and compact development. Consider the use of minimum densities and requirements for more integrated mixed use development.	Raleigh's current regulations do not provide sufficient tools to appropriately implement this action item. The UDO will consider minimum densities and integrated mixed use development.
A.2.3. Strengthening Site Plan Standards: As part of the update of the City's development regulations, seek ways to strengthen standards for site plans that are reviewed and approved administratively.	Raleigh's current regulations do not provide sufficient tools to appropriately implement this action item. The UDO will seek to strengthen site plan standards.
A.2.4. Linking Development and Infrastructure: During the update of the development regulations, consider regulations that would require the appropriate public infrastructure and facilities to be programmed before new development is permitted.	Raleigh's current regulations apply this basic concept. As new metrics such as pedestrian and bicycle levels of service are prepared, a more complete system regulating adequate public facilities may be required.

Plan Action Item	Comment
A.2.5. Regulatory Incentives: As part of the update to the City's development regulations, incorporate where appropriate, incentives aimed at achieving Comprehensive Plan policies for development and redevelopment. Incentives can include bonuses, streamlined approvals, enhanced flexibility, or other mechanisms.	Incentives need to be carefully thought out. An incentive should not be used in place of a requirement or standard that leads to acceptable quality development. An incentive should be used where the developer is providing something beyond the community norm. A complete discussion of potential incentives will occur during drafting of the UDO.
A.4. LAND USE AND TRANSPORTATION COORDINATION	
A.4.1. Accommodating Mixed Uses: During the update of the City's development regulations, revise the zoning regulations to permit mixed-use, including retail uses, in appropriate areas.	Raleigh's current regulations do not contain the tools to create vibrant mixed-use districts.
A.4.2. Connective Site Design: Amend site plan submittal standards to require provision of site improvements that support connective site design for the future development of contiguous properties, such as interparcel access, stub streets and sidewalks, greenway connectivity, and grading elevations.	Raleigh's current regulations that outline what must be included on a site plan contain standards for the dedication of greenways, but do not contain standards for increasing connectivity. Raleigh uses a series of handbooks to regulate sidewalks and streetscapes. Revised standards will be incorporated into the UDO.
A.5. LAND USE COMPATIBILITY	
A.5.1. Buffering and Screening Regulations: During the update of the City's development regulations, review and amend the buffering and screening requirements between high-intensity land uses and single-family residential uses.	Raleigh's current regulations apply transitional protective yards based on the proposed use. The UDO will consider buffers between zoning districts instead. A more complete discussion of acceptable transitions between incompatible uses will also occur.
A.5.2. Interface Area Standards: Work with citizens and the development community to define transition or "interface" areas for those areas planned for higher and more dense commercial development that are adjacent to lower density residential areas or designated historic districts and structures. Define tapering standards or establish building "step-backs."	Raleigh's current regulations apply additional setback for added height as one tool for addressing transitional areas, in addition to setbacks a series of transitional districts as well as landscape buffers may be considered. A more complete discussion of acceptable transitions between incompatible uses will occur in the UDO drafting process.
A.5.3. Zoning Changes to Reduce Conflicts: As part of the revisions to the zoning regulations, develop text amendments which: <ul style="list-style-type: none"> • Define appropriate buffering, screening. And landscaping requirements along the edges between residential and commercial and/or industrial zones; • Identify appropriate urban design treatments for managing transitions in mixed-use and urban settings; • More effectively manage the non-residential uses that are permitted as a matter-of-right within commercial and residential zones to protect neighborhoods from new uses which generate external impacts; • Ensure that the height, density, and bulk requirements for commercial districts balance business needs with the need to protect the scale and character of adjacent residential neighborhoods; and • Provide for ground-level retail where appropriate while retaining the residential zoning along major corridors. 	Raleigh's current regulations do not provide sufficient tools to appropriately implement this action item. Generally these suggested changes would be considered best practices. A more complete discussion of acceptable transitions between incompatible uses will occur in the UDO drafting process.
A.6. COMMERCIAL DISTRICTS AND CORRIDORS	
A.6.1. Zoning Standards for Mixed Use: Revise the Zoning Ordinance to modify setback and buffering to the site design requirements within designated mixed-use centers and mixed-use zoning districts to ensure compatibility and encourage dynamic communities.	Many current zoning districts set large suburban scale setbacks and prohibit uses that can contribute to activating the streets throughout the day. A complete review of setbacks, buffering and other site design standards will occur during preparation of the new UDO.

Plan Action Item	Comment
A.7. COMMERCIAL DISTRICTS AND CORRIDORS	
<p>A.7.1. Zoning Changes to Reduce Land Use Conflicts in Commercial Zones: As part of the update of the zoning regulations, consider text amendments that:</p> <ul style="list-style-type: none"> • More effectively control the uses which are permitted as a matter-of-right in commercial zones; • Avoid the excessive concentration of particular uses with the potential for adverse effects, such as convenience stores, fast food establishments, and liquor-licensed establishments; and • Consider performance standards to reduce potential conflicts between certain incompatible uses. 	Raleigh's current regulations include a use table for all districts. A complete review of uses allowed in each district will occur in drafting the UDO. Allowing more uses "by-right" with clear use standards to mitigate any negative secondary effects is a best practice. Raleigh's current regulations do not contain use standards addressing the concentration of uses.
A.7.2. Height and Bulk Hierarchy: Revise the City's Zoning Ordinance to differentiate the height and bulk requirements for commercial and residential development based on its location within a regional, community, or neighborhood center.	Raleigh's current regulations do not provide the tools to distinguish zoning districts by context. This more contextual based approach has been applied to the proposed mixed use districts in the Coding Approach Chapter of this report.
A.7.3. Promoting Commercial Reinvestment: Identify incentives and other economic development tools to promote reinvestment in under performing commercial corridors.	Current regulations do not contain the tools to reinvigorate under-performing commercial corridors.
A.8. NEIGHBORHOOD CONSERVATION AND DEVELOPMENT	
A.8.1. Common Open Space: During the update of the City's development regulations, revise the zoning ordinance to require common usable open space within newly constructed subdivisions.	Raleigh's current regulations do not require subdivisions to provide common open space and do not provide a hierarchy of lands to be protected as primary and secondary open space. These strategies will be incorporated in the UDO.
A.8.2. Open Space Networks: Study amending the City's subdivision regulations to require the preservation of ecological resources such as contiguous woodlands, wetlands, and floodplains as part of a development's open space requirements.	Raleigh's current regulations do not provide standards for how open space should be structured or the form it should take. The UDO will provide guidelines for the form openspace should take when it is provided.
A.8.4. Infill Standards: As part of the Zoning Code update, introduce new zoning districts and/or other zoning tools for infill development.	Raleigh's current regulations make infill redevelopment of older established neighborhoods with small lots difficult. Currently, subdivision review is problematic for infill subdivision. The UDO will streamline this process while providing standards to help protect the character of existing neighborhoods.
A.8.5. Infill Procedures: Make changes to the City's procedures (including administrative review) for approving infill residential development proposals to improve consistency and predictability of the process that will ensure that such developments are compatible with the built environment of established neighborhoods into which they are placed.	Raleigh's current regulations do not include contextual infill standards or other techniques to ensure compatibility of new development in established neighborhoods. The UDO will propose such standards.
A.9. RESEARCH AND DEVELOPMENT/INSTITUTIONAL LAND USES	
A.9.1. Zoning for the Tech Sector: As part of the update to the City's development regulations, consider the creation of a new zoning district targeting office, research and development, and flex space development.	Raleigh's current regulations contain three zoning districts geared toward institutional and campus uses. These will be reworked and enhanced in the UDO, keeping in mind the activities of a modern research and development facility.
A.9.3. Institutional Overlay District: Work with higher education institutions to prepare an overlay district for large institution and campus uses, such as colleges, universities, hospitals, and research centers that tailors zoning requirements more closely to the needs of these institutions.	Raleigh's current regulations do not contain an institutional overlay, but provide a combination of three zoning districts geared toward institutional and campus uses. The UDO will update the standards for select existing base districts and provide standards for a NEW campus district as outlined in the Coding Approach Chapter of this report.

Plan Action Item	Comment
A.10. RETAIL LAND USES	
A.10.1. Performance Standards for Big Box Retail: During the update of the City's development regulations, consider zoning revisions that establish locational and requirements and/or performance and design standards for big box retail	Raleigh's current regulations do not contain standards for the siting or development of large-scale retail buildings or the associated parking. The UDO will provide appropriate standards for minimizing the negative impact of large scale retail as laid out in the Mixed Use Places Chapter of this report.
A.11. INDUSTRIAL LAND USES	
A.11.1. Industrial Zoning Amendments: Amend the Zoning Ordinance to remove retail uses as "by-right" uses permitted within industrial zones.	Raleigh's current regulations permit most non-industrial uses in the industrial districts by right. As discussed in the Coding Approach Chapter of this report, these uses will continue to be permitted in the Industrial Mixed Use district but will be greatly reduced in the pure industrial districts.
A.11.2. Industrial Land Use Compatibility: During the revision of the zoning regulations, develop performance standards and buffering guidelines to improve edge conditions where industrial uses abut residential uses, and to address areas where residential uses currently exist within industrially zoned areas.	Raleigh's current regulations include landscape buffers based on the intensity of the use. High impact (including industrial) uses must be buffered from medium impact, low impact and residential uses. A review of appropriate transitions between incompatible uses will occur during the UDO drafting process.
A.12. LARGE SITE DEVELOPMENT	
A.12.1. PDD Revisions for Large Sites: Revise the City's Planned Development District (PDD) regulations to encourage more fine-grained planning of large site developments through an approved master plan, which may establish custom land use regulations to apply after the master plan is approved.	Raleigh's current regulations contain provisions for residential and non-residential planned developments. Several PDD's require single use and others have a minimum site size that is too large to promote infill development. The UDO will consolidate and update the current PDD standards as outlined in the Process and Administration Chapter of this report.
B. TRANSPORTATION	
B.1. LAND USE AND TRANSPORTATION COORDINATION	
B.1.2. Transportation Impact Analysis: Develop and adopt regulations that establish a threshold to require a transportation impact analysis (TIA) for all proposed new and expanded development, as well as zoning map amendments. These regulations should meet or exceed the requirements detailed in NCDOT Traffic Impact Analysis Guidelines (see sidebar on Thresholds for Transportation Impact Analysis).	Currently, Raleigh's development regulations do not require the submittal of TIAs except as required by NCDOT. However, Transportation Services is working on an amendment which would change this.
B.1.3. Context Sensitive Solutions: Adopt Context Sensitive Solution practices to determine the most appropriate transportation improvements to minimize environmental impacts and serve adjacent and future land uses within a multi-modal network. These practices should be included in a revision to the Streets, Sidewalks, and Driveway Access Handbook.	Context Sensitive Solutions are an approach to designing new or rebuilt roads. Raleigh could define this approach as a best practice in their Streets, Sidewalks, and Driveway Access Handbook and include applicable standards into the updated UDO.
B.2. ROADWAY SYSTEM AND TRANSPORTATION DEMAND MANAGEMENT	
B.2.2. Access Management Plan: Establish a flexible Access Management Plan that identifies and helps preserve priority corridors.	The creation of an Access Management Plan is beyond the scope of the UDO, but the resulting standards should be incorporated into the UDO. Currently, access management is regulated by both the development regulations and H195.
B.2.9. Connectivity Index: Adopt connectivity index standards within the subdivision regulations to promote greater connectivity of the City's street network (see Text Box: Measures of Roadway Connectivity for detailed description).	Raleigh's current regulations do not have the tools needed to measure and regulate connectivity. These tools will be included in the UDO. Also consider standards for bicycle and pedestrian connectivity and improving connectivity between parking lots.

Plan Action Item	Comment
B.3. COMPLETE STREETS: HIERARCHY AND DESIGN	
B.3.2. Redefining Road Classification: Develop a comprehensive roadway network that categorizes streets according to function and type while considering all of the potential users and surrounding land use context.	Raleigh's current regulations do not regulate road types or standards. To implement a comprehensive roadway network, the classifications and standards for roads should be included in the UDO or the Streets, Sidewalks, and Driveway Access Handbook. Standards should be illustrated with graphics and include optional elements such as bike facilities and on-street parking.
B.3.3. Streets, Sidewalks and Driveway Access Handbook: Update the Streets, Sidewalks and Driveway Access Handbook to better address all modes of travel. Examples include provisions for bicycles in the road bed cross-section; requiring sidewalks on both sides of a greater number of streets; and addressing how different transit modes might be accommodated within the right of way.	The standards in the Streets, Sidewalks and Driveway Access Handbook should be updated and, where appropriate, incorporated into the UDO.
B.3.5. Operationalizing Complete Streets: Restructure planning, design, and construction procedures to accommodate the new Complete Streets approach in every project.	Raleigh's street standards should be updated to address needs of pedestrians, cyclists and cars. Standards should work to increase viability of transit, cycling, and walking.
B.4. PUBLIC TRANSPORTATION	
B.4.7. Shared Parking and Transit: Evaluate the need and benefits of shared Park and Ride lots in areas that have significant unused daytime parking, such as shopping malls. Work with property owners and local communities to allocate off-street parking surpluses for carpooling and transit users.	Raleigh's current regulations do not contain standards for shared parking agreements, alternative parking arrangements, or parking credits. The UDO will include these standards as well as updated parking ratios where needed.
B.5. PEDESTRIAN AND BICYCLE CIRCULATION	
B.5.2. Updating Sidewalk Standards: Update sidewalk standards and requirements after the completion of the Public Realm Study.	The UDO will include any standards developed as part of the Public Realm study.
B.5.3. Sidewalk Requirements: Revise the City's Street, Sidewalks and Driveways Access Handbook to require sidewalks on both sides of the street for most contexts.	The standards in the Streets, Sidewalks and Driveway Access Handbook should be updated and incorporated into the adopted UDO. The requirement for sidewalks on both sides of the streets will be included in the UDO.
B.5.8. Pedestrian and Bicycle Facilities in Development Regulations: Update the City's development regulations to require pedestrian and bicycle facilities including bike racks, bike trails, and signed crosswalks within mixed-use centers, future transit station areas, employment centers, office buildings, multi-family developments, and public parks. Revise subdivision regulations to require developers to provide, and homeowners associations to maintain, pedestrian and bicycle facilities to accepted standards of design, construction, and maintenance within all new developments.	Raleigh's current regulations require the provision of bicycle parking but do not include standards for the provision or maintenance of other bicycle facilities. The UDO should refer to the Raleigh Bicycle Transportation Plan and include standards for bicycle facilities.
B.5.10. Pedestrian Crossing Standards: Establish standards for maximum distances between pedestrian crossings that are also associated with roadway classification to enhance walking and transit use.	Neither the current regulations nor the Streets, Sidewalks and Driveways Access Handbook address the distance between pedestrian crossings. These standards can be incorporated into the UDO.
B.5.11. Crosswalk Safety: Widen crosswalks and install durable painted crosswalks and/or other investments pedestrian safety and visibility at crossings.	Neither the current regulations nor the Streets, Sidewalks and Driveways Access Handbook address standards for crosswalks. These standards can be incorporated into the UDO.
B.5.12. Pedestrian Signals: Install countdown pedestrian signals at important intersections.	Neither the current regulations nor the Streets, Sidewalks and Driveways Access Handbook address the installation of countdown signals.

Plan Action Item	Comment
B.6. PARKING MANAGEMENT	
B.6.1. Large Surface Lots: Revise the City's development regulations to require large parking lots to be visually and functionally segmented into smaller lots with cross access.	While the Streets, Sidewalks and Driveways Access Handbook outlines the basic standards for parking spaces, the current regulations do not contain standards for the location or design specifics of large parking lots. The UDO will provide standards for creating parking pods in place of traditional large lots as outlined in the Transportation and Mobility Chapter of this report.
B.6.2. Shopping Center Park and Ride: Require shopping centers on existing or planned transit routes and which provide 400 or more parking spaces to designate at least 5 percent of the required spaces as "Park and Ride" spaces. In addition, amend the parking design standards in the Streets, Sidewalks and Driveway Access Handbook to encourage these spaces to be contiguous and located near the transit facility. See also Public Transportation.	Neither the current regulations nor the Streets, Sidewalks and Driveways Access Handbook contain standards for "Park and Ride" facilities. Additional study is needed before implementing this action item. If not carefully applied the fear is that this could result in the addition of extra spaces to already over parked areas.
B.6.3. Parking Study Implementation: Implement the recommendations of the "Right-sizing Citywide Parking Standards" study and the Downtown Parking Master Plan, including: <ul style="list-style-type: none"> • Permitting shared parking arrangements as-of-right Downtown, in activity centers, and mixed-use developments; • Developing parking standards specific to different types of development patterns, such as downtown, mixed-use centers, and pedestrian-oriented business districts; • Revise curb side management and on-street parking techniques on city thoroughfares to best manage these transportation resources to serve multiple uses (e.g., through traffic during peak periods, local residents, shoppers, houses of worship, special events, and others.); • Revising off-street parking standards to reduce and/or adjust minimums and add maximums; and • A fee-in-lieu of parking option for development Downtown and in other areas where the City intends to provide municipal parking. 	Neither the current regulations nor the Streets, Sidewalks and Driveways Access Handbook contain standards for shared parking agreements, alternative parking arrangements, or parking credits.
B.6.5. Parking Lot Landscaping: Update the development regulations to increase landscaping requirements including shade trees in large surface parking lots.	While the Streets, Sidewalks and Driveways Access Handbook outlines the basic standards for parking spaces, the current regulations do not contain standards for the location or design specifics of large parking lots. Further, the development regulations do not offer parking credits for tree preservation in parking lots. These standards will be incorporated into the UDO.
B.7. TRANSPORTATION SAFETY IMPROVEMENTS	
B.7.1. Street Lighting: Add street lights where necessary to critical intersections, bus shelter stops, and neighborhood dark spots and maintain existing street lights to enhance safety. Remove lights where they are unnecessary for safety and where a reduction in lighting would be an environmental enhancement.	Neither the current regulations nor the Streets, Sidewalks and Driveways Access Handbook contain standards for street lights. The UDO will address issues of site lighting but will not regulate public street lighting standards.

Plan Action Item	Comment
C. ENVIRONMENTAL PROTECTION	
C.1. ENERGY SECURITY AND CLIMATE CHANGE PREPAREDNESS	
C.1.5. LEED-ND: Explore adopting the U.S. Green Building Council's Leadership in Energy and Environmental Design for Neighborhood Development (LEED-ND), or the equivalent, as a City Standard.	Under the current zoning and subdivision process it would be difficult, if not impossible, for a development to achieve LEED-ND certification without going through a planned development process. At the very least the UDO should remove any barriers to achieving LEED-ND certification.
C.1.6. LEED Incentives: Encourage and provide incentives for buildings that would qualify for Gold or Platinum LEED certification or the equivalent.	LEED (with the exception of LEED-ND) is difficult to incentivize with zoning and subdivision regulations. The building does not become certified until after the zoning entitlements have been granted and the building has been constructed, making it difficult to reclaim any entitlement bonuses if the applicant is not certified.
C.2. DESIGN WITH NATURE	
C.2.4. Environmentally Sensitive Development Controls: As part of the City's update of its development regulations, revise the City's regulations to reduce excessive cut and fill grading and the destruction of significant trees, vegetation, and Priority Wildlife Habitats (as identified by programs and agencies such as the North Carolina Natural Heritage Program and North Carolina Wildlife Resources Commission).	Current regulations offer modest protection from clear cutting sites under the auspice of tree conservation areas, soil erosion and sedimentation control and tree conservation permits. These standards will be updated in the UDO.
C.2.5. Environmental Feature Protection: As part of the update to the City's development regulations, explore incentive mechanisms that encourage developers to preserve lakes, ponds, wetlands, and other sensitive natural features.	Current regulations contain the cluster unit development tool that, if modified, could act as an incentive to encourage the preservation of sensitive natural resources. The current regulations fail to structure a hierarchy of open spaces to be protected and fail to offer adequate incentives for their protection. Additionally, the cluster unit development regulations fail to promote a mixture of housing types by expressly permitting only single housing types.
C.3. WATER QUALITY AND CONSERVATION	
C.3.2. Low Impact Development Ordinance: Develop and adopt an incentive-based Low Impact Development (LID) ordinance so that rainwater is retained and absorbed on-site, as an alternative to traditional approaches that include piping, channelization, and regional detention.	Raleigh's current regulations separate stormwater regulations from zoning and subdivision regulations. This separation makes it difficult to incentivize innovative stormwater management approaches.
C.3.11. Zoning Amendment for Steep Slopes: Amend the zoning code to prohibit the regrading and development of steep slopes of 15 percent or greater to conserve the natural contours of the City and prevent soil erosion.	Raleigh's current regulations do not offer any protection for steep slopes. The UDO will include some protections for steep slopes.
C.4. FLOOD REDUCTION AND PREPAREDNESS	
C.4.4. Floodplain Regulations: Update City development regulations to direct fill and development away from the 100- year floodplain.	Raleigh's current regulations prohibit certain uses from occurring within the floodplain, but do little to "direct fill and development away from the 100-year floodplain."
C.5. TREE CANOPY CONSERVATION AND GROWTH	
C.5.1. Tree and Landscape Ordinance Amendments: Amend existing regulations to ensure that the urban forest is maintained and enhanced and the greatest number of trees are retained during the development process. Review the criteria for allowing waivers to ensure effectiveness of the ordinance. Evaluate the appropriateness of locating primary tree save areas along the frontage of the property.	Raleigh's current regulations (including the new Tree Conservation Ordinance) provide some minimal tools for the protection of existing tree cover; however, there are significant concerns about the enabling legislation authorizing protection of trees. Additional tools related to site clearing could enhance the level of protection for existing tree cover.

Plan Action Item	Comment
C.5.3. Planting Incentives and Standards: During the update of the city's development regulations, explore opportunities to develop reforestation standards and incentives.	Raleigh's current regulations do not address reforestation standards or incentives.
C.5.4. Utility Coordination: Coordinate with utility companies to plant, manage, and maintain healthy street trees that can establish mature and natural canopies without interfering with infrastructure operation.	Street cross-sections and streetscapes will be included in the UDO. Further, a separate technical manual should be developed, and a memorandum of understanding be signed by any third party utility provider, the Department of Public Utilities and the Department of Planning.
C.5.5. Tree Planting Guidelines: Develop new street tree planting guidelines that address appropriate root space, location of planting sites, viable soils, and other issues that support the growth and function of healthy trees.	The UDO will contain the minimum spacing provisions of street trees, but all other tree planting guidelines should be placed in a separate technical manual.
C.7. MATERIAL RESOURCE MANAGEMENT	
C.7.6. Demolition Debris: Require a waste diversion statement to be submitted at the time of application for a demolition permit; the statement should include a list of material types and volumes anticipated from the demolition and the market or destination for those materials. Consider requiring the same of construction permits.	Raleigh's current regulations do not require a waste diversion statement. Some communities have enacted construction waste recycling ordinances, but they are typically separate from zoning and subdivision regulations.
C.8. LIGHT AND NOISE POLLUTION CONTROLS	
C.8.1. Lighting Regulation: Consider revisions to the lighting ordinance to reduce night-time light pollution and spill-over lighting on adjacent properties, and to incorporate new lighting technologies such as LEDs.	Raleigh's current regulations address site lighting, but do not account for modern advances in lighting technology that contribute to energy conservation and a reduction in light pollution. The UDO will modernize the site lighting standards to account for modern advances in lighting.
C.8.2. Dark Sky Initiatives: Develop a package of incentives and/or credits to promote the utilization of energy-efficient, full cut-off lighting fixtures that minimize glare and light pollution.	Raleigh's current regulations do not provide incentives for modern or innovative lighting design. Significant progress will be made by updating the current lighting standards to address modern lighting technologies. The UDO will modernize the site lighting standards to account for modern advances in lighting.
C.9. ENVIRONMENTAL EDUCATION, AWARENESS AND COORDINATION	
C.9.4. Community Gardening: Explore opportunities to develop and expand community garden programs that provide opportunities for residents to grow their own produce as well as learn and use organic gardening techniques. The City should identify publicly-owned sites that may be suitable for community gardens, work with advocacy groups to make these sites available, and manage them. Coordinate with yard waste collection and community composting.	Raleigh's current regulations do not expressly permit community gardens. At the very least the UDO will remove any existing barriers to community gardens in Raleigh's development regulations.
D. ECONOMIC DEVELOPMENT	
D.1. COMMERCIAL CORRIDOR REINVESTMENT	
D.1.2. Mixed-Use Zoning Incentives: Develop and adopt zoning mechanisms that reward and/or require mixed-use development.	Raleigh's current regulations make it more difficult to build a desirable mixed use neo-traditional development than a single use residential or commercial subdivision. The UDO will provide Raleigh with the tools needed to achieve a mixed use pattern.
D.1.4. Retail Property Code Enforcement: Actively enforce City codes to assure that commercial centers contain well maintained buildings, parking facilities, signage, lighting, landscaping, and pedestrian amenities.	A property maintenance code can be an effective means of providing stability in neighborhoods and commercial corridors but it does not belong in a UDO.

Plan Action Item	Comment
D.2. NEIGHBORHOOD REINVESTMENT	
D.2.6. Neighborhood Commercial Regulations: During the update of the city's development regulations, review provisions that prevent integration of small commercial establishments within neighborhoods to allow inclusion of cafes, restaurants, corner stores (that do not sell liquor), and other desirable local good and services.	Providing a mixture of uses is essential to the creation of walkable neighborhoods. However, the injection of small commercial uses into existing single use residential areas can be difficult and should be done carefully and only with specific use standards. Raleigh's current regulations do not easily permit the mixture of small commercial uses and residential development. The mixed use districts discussed in the Coding Approach Chapter of this report will help implement this action item.
D.3. ENTREPRENEURS AND BUSINESS DEVELOPMENT	
D.3.4. Home Based and Cottage Industry Regulation: During the update to the City's development regulations, review regulations on home-based business to maintain appropriate regulations but also accommodate the growing trend of low-impact, home-based businesses.	Raleigh's current regulations provide some control of home occupations, however, some of the controls are difficult to enforce. The UDO will update these standards to reflect modern trends in home-based businesses.
D.5. ECONOMIC DEVELOPMENT AND LAND USE	
D.5.5. Mixed Use Zoning Incentives: Provide zoning incentives for residential development in and near targeted business districts with mixed-use potential due to pedestrian and/or transit accessibility.	Raleigh's current regulations do not incentivize mixed use development. The UDO's approach to mixed use districts is discussed in the Coding Approach Chapter of this report.
D.6. HOSPITALITY AND TOURISM	
D.6.3. Cultural Resource Preservation: Provide development or financial incentives for preservation of cultural resources.	Raleigh's current regulations address historic preservation through the use of historic overlay districts. Cultural preservation does not necessarily have to be historic in nature and is not as dependent on character and design elements. The most important role of zoning in the preservation and enhancement of cultural resources would be to remove any regulatory hurdles. See also K. Arts and Culture below.
E. HOUSING	
E.1. QUALITY AND DIVERSITY OF HOUSING	
E.1.2. Zoning for Mixed Income: As part of the update of the City's development ordinances, include zoning provisions such as the creation of an inclusionary housing program that encourages mixed-income developments throughout the City.	While many jurisdictions require inclusionary zoning, many more offer density or height bonuses, expedited permits, reduced fees, cash subsidies, or other incentives for developers who voluntarily build affordable housing. There is no express legal authority in North Carolina that allows inclusionary zoning. A mandatory program of this nature would require special enabling legislation from the General Assembly.
E.1.3. Zoning for Housing Diversity: As part of the update of the City's development ordinances, develop zoning provisions for transit-oriented development that promote housing diversity and affordable housing choices.	Transit-oriented development is typically higher density, and may not include diverse housing types. Also, transit-oriented sites are often some of the community's most expensive land, and affordability is difficult to achieve without public-private partnerships. Raleigh's current regulations do not contain provisions that adequately permit or encourage a diverse mix of housing types. The UDO will provide tools to address the issue of mixed housing types and of increased density around transit areas.

Plan Action Item	Comment
E.2. AFFORDABLE AND WORKFORCE HOUSING	
E.2.3. Inclusionary Housing Ordinance: Develop an inclusionary housing ordinance that provides bonuses for affordable housing as part of all larger developments throughout the city, and create a program, entity, or partnership to oversee its compliance.	While many jurisdictions require inclusionary zoning, many more offer density or height bonuses, expedited permits, reduced fees, cash subsidies, or other incentives for developers who voluntarily build affordable housing. There is no express legal authority in North Carolina that allows inclusionary zoning. A mandatory program of this nature would require special enabling legislation.
E.2.7. Fast-Tracking Affordable Units: Provide an expedited or fast tracking development review process for housing developments that include at least 10 percent affordable units or 20 percent workforce units.	Raleigh's current regulations do not contain provisions for fast-track approval of affordable housing or for developments containing other desirable sustainability traits. Further discussion of this issue should take place during the drafting of the UDO.
E.2.8. Review of Potential Barriers: Review existing regulations and development processes to determine what modifications could remove barriers and provide incentives for affordable housing production.	One of the most important roles of a UDO is to get out of the way or to even entice the types of development that a community desires most. Years of patchwork zoning amendments have led to current regulations that often get in the way of the right types of development occurring. Elimination of barriers will be a key focus of the new UDO.
E.2.9. Accessory Dwelling Unit Standards: During the update of the City's development regulations, examine and then expand the number of zoning districts where accessory dwelling units are permitted.	Raleigh's current regulations are very limited in where they permit accessory dwelling units. The UDO will provide standards that will promote the use of appropriate accessory dwelling unit in more residential districts.
E.2.11. Parking Reductions: Reduce off-street parking requirements for developments containing affordable housing units.	Raleigh's current regulations do not provide any credit for provision of affordable housing. Updated parking ratios and a system of parking credits will be created in the UDO as outlined in the Transportation and Mobility Chapter of this report.
E.3. SUPPORTIVE AND SPECIAL NEEDS HOUSING	
E.3.4. Eliminating Barriers to Supportive Housing: Review zoning regulations controlling location of supportive housing and rooming houses to eliminate any undue barriers and facilitate development of additional units.	These regulations will be reviewed during the drafting of the UDO.
E.3.5. Rooming Houses and Transitional Housing: Update the regulations for the spacing, density, licensing, and upkeep of rooming houses and transitional housing.	Current regulations that successfully regulate the clustering of supportive living facilities and similar use standards should be extended to rooming houses and transitional housing in the UDO.
E.4. FAIR HOUSING, UNIVERSAL DESIGN, AND AGING IN PLACE	
E.4.3. Aging In Place: Incorporate the principle of "aging in place" in the City's revised development regulations for residential construction in new subdivisions and multi-family communities. Such regulations should address accessibility, visibility, and the ability to access goods, services, and amenities without a car.	Raleigh's current regulations make it difficult to mix housing types and uses in order to promote aging in place. The UDO will provide standards for the mixing of certain types of housing types.
E.4.5. Focus on the Housing Needs of the Physically Challenged: Include an enhanced focus on the housing needs of the physically challenged in the City's revised development regulations; in particular ensure that housing accessible to residents with physical challenges is included along transit corridors and near transit stations.	Raleigh's current regulations do not adequately provide for accessibility in the public realm and do not address the need for accessible housing along transit corridors. The UDO will take steps to eliminate barriers to accessible housing.

Plan Action Item	Comment
F. PARKS RECREATION AND OPEN SPACE	
F.2. PARK SYSTEM AND LAND ACQUISITION	
F.2.5. Zoning Incentives for Recreation: Explore zoning incentives for developers and land owners to increase recreational amenities and tie-ins to municipal recreational projects on their property or as part of new developments.	Raleigh's current regulations provide density incentives for exceeding open space requirements in the downtown overlay district. Further they require dedication and reimbursement for easements along identified greenways. The UDO will provide options for new cluster subdivisions which exchange smaller permitted lots for meaningful public open space as outlined in the Coding Approach Chapter of this report.
F.3. GREENWAY SYSTEM LAND AND TRAILS	
F.3.4. Stream Buffer Acquisition: Accelerate greenway acquisition to incorporate at least 100-foot wide vegetative buffers on the entire 100-year floodplain, whichever is greater, along designated streams.	Raleigh's current regulations require dedication and reimbursement for easements along identified greenways. This action item is something that typically would not be found in a UDO.
F.4. RECREATIONAL FACILITIES AND PROGRAMS	
F.4.3. Open Space in New Development: As part of the update to the City's Development regulations, require the private sector to provide usable, publicly accessible open spaces and paths in new developments, and ensure that they are connected to the public sidewalks and/or the greenway system.	Raleigh's current regulations contain a requirement for dedication and reimbursement of lands along identified greenways. There is no requirement for usable, publicly accessible open spaces and connected paths. The UDO will provide options for new cluster subdivisions which exchange smaller permitted lots for meaningful public open space as outlined in the Coding Approach Chapter of this report.
F.4.5. Performance Standards for Recreation Facilities: Revise the private development process to include performance standards and incentives for integrating public recreation facilities, such as neighborhood and community center buildings, into development site plans.	Raleigh's current regulations treat governmental, non-profit and commercial recreation facilities in residential districts differently. Clarity and consistency of approach to incorporating recreational facilities will be part of the UDO.
F.5. OPEN SPACE AND SPECIAL LANDSCAPES	
F.5.1. Mandatory Greenway Dedication: Continue the program of mandatory greenway land dedication from residential development to further the goals of the Capital Area Greenway program, and explore expanding it to non-residential development.	Raleigh's current regulations include a program of dedication and reimbursement of greenways. This program should be expanded to include non-residential property, and may use a different set of standards for these properties.
F.5.2. Code Requirements for Accessible Open Space: Ensure public access to open space in projects with public financial partnerships, such as downtown parking garages, plazas, and squares.	Raleigh's current regulations provide an incentive program in the downtown overlay district which increases density in exchange for the provision of additional open space. Standards for open space will be provided in the UDO.
F.5.3. Streetscape, Gateway, and Public Space Improvements: Continue to pursue development of, and maintain a link to, the City's Capital Improvement.	This action item is not specific to a development code; however the public improvements provided for in Raleigh's Capital Improvement Plan should be consistent with the comprehensive plan and with the standards established in the UDO.
G. PUBLIC UTILITIES	
G.2. UTILITY EXTENSIONS	
G.2.3. Reuse Pipe Ordinance: Prepare ordinance text regarding the provision of reuse pipes for irrigation in subdivisions or other allowable uses of reclaimed water.	Raleigh's current code provides some standards for reuse water but it is not located in the development regulations. The subdivision regulations should contain provisions requiring the installation of "dry" reuse pipes at the time of subdivision.

Plan Action Item	Comment
G.2.4. Dual Plumbing Incentives: Study the option of encouraging dual plumbing in houses by offsetting the cost through reduced fees.	This type of incentive should not be in the UDO.
G.3. DRINKING WATER	
G.3.4. Drought Tolerant Landscaping: Adopt landscaping ordinances that mandate or incentivize the use of drought-resistant plant species to minimize the need for irrigation.	Raleigh's current regulations do not require the use of drought tolerant plants in required landscaping buffers.
H. COMMUNITY FACILITIES AND SERVICES	
H.2. SOLID WASTE	
H.2.6. Solid Waste Services Site Plan Review: Include Solid Waste Services in the Development Plans Review Group site plan meetings.	Current regulations state that the Development Plans Review Group is appointed by the City Manager. The City Manager should appoint a representative of the City's Solid Waste Services.
H.2.7. Regulations for Recyclables Storage: Update the site plan regulations to include mandatory accommodations for recycling in all new public and private developments.	Raleigh's current regulations neither requires nor addresses the provision of recycling or composting as a site development standard. It is important to note that the role of the development regulations would be to control the location and screening of such facilities but not to mandate them. The requirement to provide such facilities should be included in another section of the Raleigh Code (Part 7 Solid Waste Services).
H.3. PUBLIC SAFETY	
H.3.1. CPTED Development Plan Review: Include components of the Crime Prevention through Environmental Design (CPTED) program in the Development Plan review process.	Crime Prevention Through Environmental Design (CPTED) strives to deter criminal behavior through the manipulation of the built environment. Some of the principles of CPTED can be found in Raleigh's existing development regulations but several other principles such as building orientation, transparency, landscaping and lighting design will be incorporated in the UDO.
H.5. HEALTH AND HUMAN SERVICES	
H.5.1. Zoning for Health and Human Services: Evaluate zoning in urban centers and priority corridors to ensure health and human services facilities siting can be accommodated.	Raleigh's current regulations do not expressly address the siting of health and human services.
I. URBAN DESIGN	
I.1. RALEIGH'S IDENTITY	
I.1.6. Using Zoning to Achieve Design Goals: Explore zoning and other regulatory techniques to promote excellence in the design of new buildings and public spaces. Zoning should include incentives or requirements for facade features, window placement, courtyards, buffering, and other exterior architectural elements that improve the compatibility of structures, including roof structures, with their surroundings while promoting high architectural quality.	Raleigh's current regulations do not effectively address building form or design. Concepts from the separate Commercial Design Guidelines manual that appear in the form of standards should be incorporated into the UDO to the maximum extent possible.
I.2. DESIGN OF MIXED-USE DEVELOPMENTS	
I.2.1. Regulatory Barriers to Mixed Use: Reevaluate the requirements in the development code for separation of uses, transitional protective yards, and large setbacks to allow alternate means of compliance for landscape requirements and encourage connectivity of public spaces.	The UDO will revise existing development regulations to be more sensitive to their context, including separation of uses, buffers and setbacks.

Plan Action Item	Comment
I.2.2. Stepbacks for Taller Buildings: During the update of the City's development regulations, consider additional step-backs for multi-story buildings based on the height of the building.	Raleigh's current regulations require additional setback for additional height. A stepback would be one alternate approach to this requirement, an FAR cap would be another approach and the use of additional transitional strategies is a third approach discussed in the Coding Approach Chapter of this report.
I.3. APPEARANCE AND FUNCTION OF RALEIGH'S CORRIDORS	
I.3.1. Corridor Overlay Districts: Develop Corridor Overlay Districts to implement the intended development pattern along Multi-modal, Urban and Parkway corridors.	Raleigh's current regulations do not contain the framework needed to provide the proper controls and incentives to create the desired development pattern. The proposed mixed use districts discussed in the Coding Approach Chapter of this report should provide some tools to implement this action item.
I.3.2. Undergrounding Utilities: Underground utility lines as part of long-term corridor design plans.	The UDO should require all new utilities to be placed underground. Further, the street cross-sections and associated streetscapes must allow for the successful placement of utilities underground.
I.3.3. Parking Lot Design Standards: Revise Zoning Code provisions for parking lot design, including location relative to building placement, pervious and impervious surfaces, screening, and tree coverage. Regulations for parking lot landscaping should maximize the potential for tree growth.	Raleigh's current regulations provide little guidance as to the layout and design of parking lots. The Transportation and Mobility Chapter of this report discussed the approach to parking lot design in the UDO.
I.4. CREATING INVITING PUBLIC SPACES	
I.4.1. Open Space Standards: Revise the site plan standards for new developments and redevelopment of existing sites, to incorporate requirements for providing public plazas or publicly-accessible open spaces.	Raleigh's current regulations do not provide standards for the allocation or design of formal open space. If formal common open space is desired, then minimum standards will be established in the UDO.
I.5. DESIGNING SUCCESSFUL NEIGHBORHOODS	
I.5.1. LEED-ND Program: Implement the new LEED Neighborhood Design (-ND) certification program for neighborhoods as a possible new strategy to reduce energy and resource consumption and improve the long-term sustainability of Raleigh.	The LEED-ND criteria and score card will be considered in drafting the UDO.
I.5.2. Retaining Landscaping: Require that new construction or additions retain existing landscaping and vegetation to the greatest extent possible.	Raleigh's current regulations do not require the retention of existing landscaping outside of buffer areas. This issue should be discussed in the drafting of the UDO.
I.6. PEDESTRIAN FRIENDLY DESIGN	
I.6.1. New Planting Techniques: Study and integrate new planting techniques in streetscape design including wider planting/landscape strips between the curb and sidewalk and tree pits that will extend tree life.	Requirements for design of planting areas should be included in the Streets, Sidewalks, and Driveway Access Handbook. General design standards should be included in the UDO.
I.6.2. Street Tree Provisions: Update design standards and Zoning Code provisions to incorporate appropriate requirements for the selection, placement and spacing of street trees.	Requirements for selection of trees should be included in the Streets, Sidewalks, and Driveway Access Handbook. Some standards such as tree placement and spacing will be included in the UDO.

Plan Action Item	Comment
I.7. DESIGN GUIDELINES	
I.7.1. Lighting Standards: Review and revise development regulations regarding the design, number and placements of light fixtures, and their co-location with other streetscape elements on single poles (i.e. street lighting, pedestrian lighting, and banners).	Raleigh's current regulations address the performance standards of site lighting but do not address the performance requirements for lighting in the public right-of-way. Typically, a UDO only regulates site lighting but streetscapes may include the placement of street light poles to ensure compatibility with street trees and other street furniture.
I.7.2. Zoning Code Review: Re-evaluate provisions of the City's Zoning Code related to overlay districts, development, and sign regulations to improve standards related to design.	Design considerations will be evaluated during drafting of the UDO.
I.7.3. Streets, Sidewalk, and Driveway Handbook Revision: Revise the Streets, Sidewalks and Driveway Access Handbook to: <ul style="list-style-type: none"> • Revise the sidewalk widths for different uses and contexts; • Include pedestrian oriented design standards including maximum distance between crosswalks and high-visibility markings at intersections; • Differentiate between different designations of streets as defined on the Growth Framework map; • Differentiate between corridors which are programmed to be transit-intensive; and • Revise street cross sections to enhance the distance between the curb and sidewalk to allow street tree planting. 	Appropriate street and sidewalk design standards will be incorporated into the UDO. The Streets, Sidewalks and Driveway Access Handbook should be continued as a technical manual.
I.7.4. Transit Supportive Design Guidelines: Codify relevant design guidelines as standards that support transit and other modes of travel. Such standards should be applied in the development review process in mixed-use centers and along multi-modal transportation corridors.	Raleigh's current regulations do not provide the framework for regulating form or design along multi-modal transit corridors. The proposed mixed use districts outlined in the Coding Approach chapter of this report combined with updated streetscape standards will contribute to the implementation of this action item.
I.7.5. Siting of Service Equipment: Develop standards for the locations of transformers and HVAC equipment and other building-mounted, non-street utility meters and service equipment. These standards should address the relation of such structures to buildings and public spaces, as well as suggestions for screening.	The location and screening requirements of mechanical and utility appurtenances will be included in the UDO.
I.7.6. Sign Ordinance Revisions: Re-evaluate and revise the City's sign ordinance. Signage should be human scale and serve both pedestrians and automobiles	Raleigh's current regulations control the location and placement and manner of display of certain signs, but should be evaluated in the process of updating the UDO.
I.7.7. PBOD and PD-CU Overlay Revisions: Revise the zoning regulations for the Pedestrian Business Overlay District and the Planned Development Conditional Use Overlay Districts to make the application and amendment process more efficient and less onerous.	The UDO drafting process will consider both design standards and streamlining of development approvals.
I.7.8. Unity of Development: Revise the Unity of Development regulations to allow for more diversity in the styles and materials of new construction.	Raleigh's current regulations contain minimal guidelines for controlling unity of developments. The UDO drafting process will consider updating design standards. Design standards need to accommodate large mixed use development as well as smaller scale commercial development.

Plan Action Item	Comment
J. HISTORIC PRESERVATION	
J.2. PLANNING, ZONING AND NEIGHBORHOOD CONSERVATION	
J.2.6. Downtown Historic Overlays: Consider designating local historic overlay districts in downtown for Fayetteville Street National Register district, Depot National Register district, and South Person-South Blount Streets redevelopment plan area.	Raleigh's current regulations contain the framework for historic overlay districts. These districts will be retained in the updated UDO and could be extended to additional qualifying areas.
J.2.7. Applying Zoning Regulations and Planning Tools: Use Historic Overlay Districts, Neighborhood Conservation Overlay Districts, and other zoning regulations and planning tools in response to neighborhood requests for protection and conservation.	Raleigh's current regulations contain the framework for both historic overlay districts and neighborhood conservation overlay districts. These districts could be extended to additional qualifying areas. The NCOD framework and process may also require some changes.
J.2.9. Limited Historic Overlay District: Explore creation of a new historic overlay district that would require limited design review for existing structures as a means of making historic designations more appealing to eligible residential districts.	A new limited historic overlay district will be considered in the UDO drafting process.
J.2.11. Assessing Impacts to Historic Resources: Revise the review standards for rezoning petitions, subdivisions, and site plan applications to require that submittals provide an analysis of potential impacts on local or National Register-listed historic resources. Where adverse impacts are identified, require proposals to minimize and mitigate such impacts.	Raleigh's current regulations do not consider impacts to historic resources when considering applications in areas other than historic districts. The UDO could include such a standard of review provided the historic area or site is either adjacent to or within a set distance of the subject property.
J.3. HOUSING AND BUILDING CODES, REHABILITATION, AND ADAPTIVE REUSE	
J.3.1. Parking Reduction for Adaptive Use: Initiate a City Code text change to reduce parking requirements for adaptive use projects to minimize site development impacts for historic sites and neighborhoods.	Raleigh's current regulations do not provide adequate parking reductions for infill projects nor do they provide for alternative parking plans or significant parking credits. The UDO will update parking standards to provide parking credits and alternative parking plan options.
J.3.4. City Repair and/or Acquisition: Develop City procedures to abate violations affecting historic resources through repair and/or acquisition rather than demolition when the owner is uncooperative.	To the extent that this action item concerns demolition by neglect in historic districts it should be addressed in the UDO. To the extent that this action item concerns building code violations, it should be addressed in the separate building code.
J.3.5. Unsafe Building Code and Preservation: Evaluate potential Unsafe Building determinations against the Code of General Ordinances Division II, Part 10, Chapter 6., Article J. "Demolition by Neglect of Historic Landmarks and Structures within Historic Overlay Districts" to determine which enforcement tool would most likely result in abatement of the violation and preservation of the resource.	Demolition by neglect should be taken out of Part 10 Chapter 6 (Building and Housing Code Enforcement) and included in the UDO.
J.3.6. Demolition Permit Conditions: Institute permit mechanisms based upon specific criteria and findings so that demolition permits for National Register designated property or Raleigh designated historic resources approved for removal are only issued at the time of submittal for new construction building permits.	Raleigh's current regulations do not contain any requirement linking demolition to new construction. To the extent that demolition permits in historic areas are included in the UDO this idea will be included in the UDO.

Plan Action Item	Comment
K. ARTS AND CULTURE	
K.2. ART AND ENTERTAINMENT DISTRICTS	
K.2.1. Arts Overlay Zones: Consider amending the City's Zoning Code to create Arts/Entertainment Overlay Districts.	Raleigh's current regulations do not contain the framework needed to provide the proper controls and incentives to create a vibrant arts district. The proposed mixed use districts outlined in the Coding Approach Chapter of this report should be able to address the needs of these districts.
K.2.4. Moore Square, Glenwood and Warehouse Arts Districts: Formalize and designate the following as Arts and Entertainment Districts: <ul style="list-style-type: none"> Moore Square Arts District Glenwood Avenue Arts District Warehouse Arts District 	No Arts and Entertainment Districts currently exist in the text of the development regulations.
K.3. ARTS AND CULTURAL VENUES	
K.3.3. Live/Work Regulations: During the update to the City's development regulations, incorporate flex/live-work space for artists and other creative professionals as appropriate.	Raleigh's current regulations do not provide standards for live/work type uses or building types. The UDO will contain standards for live-work uses.
L. REGIONAL AND INTER-JURISDICTIONAL COORDINATION	
L.2. LAND USE AND GROWTH MANAGEMENT	
L.2.4. Rural Development Guidelines: Prepare rural development guidelines for the Long Range USA with collaboration between the City, Wake County, adjacent municipalities, and affected residents and property owners.	To the extent that these areas are beyond Raleigh's ETJ, the implementation of this action item typically would not directly involve the UDO. The tool is useful when the ETJ is extended to rural areas.
L.4. EDUCATION INVESTMENTS	
L.4.4. Rezoning Impacts on Schools: Implement recently adopted guidelines for evaluating the impact of re-zonings and proposed site plans on the school system.	The consideration of available public facilities should be made part of the review standards in the UDO.
M. DOWNTOWN RALEIGH	
M.1. LAND USE	
M.1.1. Downtown Zoning District: As part of the City's update of its development regulations, amend the zoning ordinance to create a new "Downtown" zoning district to regulate mixed-use development in the downtown. This general use district would replace the current zoning scheme of different base districts plus a downtown overlay, and would roughly correspond to the area mapped "Central Business District" on the Future Land Use Map. Floor Area Ratio (FAR) should be the primary tool for regulating development intensity in the Downtown district.	Raleigh's current regulations provide for a downtown overlay district. This overlay district should be replaced with a series of districts outlined in Coding Approach Chapter of this report.
M.1.2. Form-Based Zoning in Downtown: Explore the use of form-based zoning to guide infill and mixed-use development downtown.	Raleigh's current regulations do not contain a form-based approach. The UDO will incorporate many form based elements into the districts for downtown.
M.1.9. Density Bonuses for Public Benefits: Review the density bonus regulations and refine if necessary to ensure that the incentives offered foster the desired public benefits.	Raleigh's current regulations provide a "buy up" system with an established maximum base density in the downtown. Developers are then permitted to "buy" additional density through by providing additional amenities in their projects. The UDO will replace this approach with a series of by-right districts outlined in the Coding Approach Chapter of this report.

Plan Action Item	Comment
M.1.10. Zoning and High Density Development: During the update of the City's development regulations, define ways to manage high-density development so that it is sited in appropriate areas and that new developments include public realm amenities.	Current regulations focus on density. One approach to consider is to regulate the building form, including building envelope standards such as height, lot coverage, setbacks, etc., to ensure the desired end result.
M.1.11. Regulation of Drive-Through Uses: Amend the Zoning Code to prohibit drive-throughs in Downtown and pedestrian-oriented business districts.	Raleigh's current regulations neither address the issue of drive-throughs in pedestrian oriented areas nor address the clustering of drive-thru restaurants. Raleigh should consider both in the drafting of the UDO.
M.2. TRANSPORTATION	
M.2.1. Expand the Downtown Grid: Study expansion of the downtown grid north along Capital Boulevard. Create new roadway connections throughout downtown to better disperse and serve the growing traffic volumes. Specifically explore: - S. West St. to W. Lenoir St. over the railroad tracks; - W. Morgan St. to Western Blvd. west of Central Prison; and - A new east/west connection between N. Blount St. and N. Glenwood Ave., north of Peace St.	This action item is better served in the form of a small area plan.
M.2.5. Downtown Street Design Standards: Develop Downtown-specific design standards for street, sidewalk, and bicycle networks for incorporation into the Streets, Sidewalks and Driveways Access Handbook (SSDAH). Specifically, conduct a study to define, designate and develop street sections and design standards for inclusion in the SSDAH for key types of streets within Downtown.	Raleigh's current regulations regulate streetscapes and street cross-section in the Streets, Sidewalks and Driveways Access Handbook. Many of these standards will be incorporated into the UDO.
M.2.8. Green Street Design Standards: Study, schedule, design, and fund new facilities that integrate sustainable streetscape technologies for the Green Streets identified on MAP DT-4. Use initial implementation of Green Streets to refine the concept and identify additional streets where implementation is appropriate. Green Streets should include: pedestrian amenities; landscaped planting strips where space permits; wider sidewalks, bicycle lanes, and mid-block crossings; recommended speed limit maximums of 25 mph; signage and way finding embedded into the concrete that clearly denotes the street as a "green street" and provides information about greenway connections; pedestrian-scaled, energy-saving "light-emitting diode" (LED) street lighting; and innovative stormwater management facilities such as porous pavers, tree boxes, and rain gardens.	Raleigh's current regulations regulate streetscapes and street cross-section in the Streets, Sidewalks and Driveways Access Handbook. Many of these standards will be incorporated into the UDO.
M.2.18. Parking In-Lieu Fee: Revise the zoning ordinance to provide a "fee-in-lieu" option for downtown whereby developers can buy out of their minimum parking requirements by contributing towards the provision of City-provided parking.	Raleigh's current regulations do not provide a fee-in-lieu of system for parking. Discussions regarding this issue should continue during the UDO drafting process.
M.2.19. Downtown Loading and Service Regulations: During the update of the City's development regulations, review the sufficiency of regulations in the Zoning Code for off-street loading and service areas Downtown.	Loading and service areas will be part of drafting the UDO.
M.3. ECONOMIC DEVELOPMENT	
M.3.2. Facade Improvement Incentives: Incentivize improvements to building and storefront facades.	Financial incentives are not typically included in development regulations.
M.4. HOUSING	
M.4.1. Zoning for Downtown Housing: During the update to the City's development regulations, review and reduce regulatory impediments that inhibit the adaptive reuse of commercial buildings for housing.	This is likely a building code issue, and no barriers will exist in the UDO.

Plan Action Item	Comment
M.4.3. Tools and Regulations for Affordable Housing: Develop and implement financial and development tools and regulations (i.e. increased density bonuses) that will incentivize the inclusion of affordable housing in and around Downtown.	Incentivizing affordable housing is an example where incentive in the form of additional height or additional lot coverage can be effectively implemented.
M.5. PARKS RECREATION AND OPEN SPACE	
M.5.1. Fees for Open Space: Create a fund supported by development fees and fee-in-lieu of open space and public art provisions to bank open space and pay for public realm amenities in downtown.	Raleigh's current regulations do not contain a payment-in-lieu of provision for public art and public realm amenities. Discussions regarding this issue should continue during the UDO drafting process.
M.5.3. Development Regulations for Open Space: During the update to the City's development regulations, identify ways to provide visible open space within new residential, non-residential, and mixed-use developments. Include methods to incentivize the provision of publicly-accessible open space, such as a restructuring of the density bonus system.	Open space requirements will be considered in the drafting of the UDO.
M.7. URBAN DESIGN	
M.7.1. Managing High-Rise Impacts: During the update of the City's development regulations, consider ways to address the impacts of new buildings, especially towers, on adjacent public and private property related to the height/width ratio of streets, wind and shadow, privacy, setbacks, step backs and adequate spacing of towers. Determine the allowed degree of shade cast from buildings on major public spaces such as Moore and Nash Squares.	Raleigh's current regulations do not contain an adequate framework to regulate tower impacts or shade in public spaces.
M.7.2. Downtown Planting Standards: Develop tree planting standards addressing tree selection, placement and spacing for all Downtown streets.	Raleigh's downtown streetscape standards should be included in the UDO.
M.7.6. Regulations for Building Crowns: During the update to the City's development regulations, investigate changes to the regulations that address crown features for tall buildings and buildings on prominent sites that have high visibility from key gateways.	Raleigh's current regulations do not contain an adequate framework to regulate building crowns in gateway locations.
N. IMPLEMENTATION	
N.1. ZONING REGULATIONS AND CONSISTENCY	
IM.1.1. Revision of Development Regulations: Undertake a comprehensive revision to the City's development regulations following the adoption of the Comprehensive Plan.	Parts of Raleigh's current development code date back to 1959. The current code is outmoded, difficult to use and unless it is completely revised will obstruct the implementation of the plan.
IM.1.2. Annual Review of Development Regulations: Annually review and update the City's regulations to account for any adopted Comprehensive Plan amendments, emerging issues, and market or real estate trends.	Annual updates to both the plan and the code are strongly recommended but typically are not directives codified in an updated UDO.
AP. OVERVIEW OF AREA PLAN	
AREA PLAN 4: CAMERON PARK	
AP-CP 3 Cameron Park Mixed-Use Zoning: Request changes to the City zoning code to allow mixed-use structures in Transition Area A (along Hillsborough Street); for instance, ground floor offices with dwellings on upper floors.	The Coding Approach Chapter of this report outlines a series of mixed use districts including an office dominated district proposed for the UDO.

Current Plans & Guidelines

Cameron Village Streetscape Plan (2003) and Plan Amendment (2008)

This privately commissioned plan addressed the planned redevelopment of Cameron Village, Raleigh's original shopping center. The urban design plan encompasses the planned streetscape elements to be promulgated throughout the area including street trees, landscaping, pedestrian lighting, planters, and street furniture. Some cosmetic changes are proposed for the existing structures but the existing building placements are not expected to be affected. At present the buildings are generally setback from the surrounding streets with parking lots between the building frontage and the public right-of-way.

Cameron Village remains a very introverted single-use shopping center with large parking field separating the building facades from the public streets. The sole exception is the plan amendment that was adopted that permits a planned six-story mixed-use development at the corner of Oberlin Road and Clark Avenue that a subsequent plan amendment contemplated.

Downtown Streetscape Improvement Master Plan (1991)

The city adopted a streetscape master plan that included sidewalk paving, dimensions, materials, types and patterns, street furniture, curbing type and materials, street tree locations and types, tree guard location and appearance, and street lighting types and spacing. The plan is a complete streetscape plan for the entire downtown area, most of which appears was implemented. The Urban Design Guidelines for the Downtown were adopted as a companion to this overall planning process.

GlenLake Office Park (2001)

This plan, commissioned by Highwood Properties, for their parcel between Edwards Mill Road and Glen Eden Drive, provides the urban design elements for a suburban office campus along a pedestrian-friendly boulevard. While buildings are placed in close proximity to the street and parking is situated behind the buildings in a series of structured parking facilities. The proposed buildings (including those that have been constructed) are single-use office buildings leaving little opportunity for good quality mixed-use development. Only a small portion has been built to date.

Glenwood South Streetscape and Parking Plan (2000) (revised 2008)

According to the plan, "Glenwood Avenue is a transitional boundary between the downtown urban area and the low intensity mixed-use areas west of the street." The plan is intended to "build upon the existing streetscape characteristics to accent the transition in development intensity while establishing unifying elements for the streetscape." In addition to the other streetscape elements, the plan also addresses elements of the building façade as well as noting a zero foot front setback. The overall building heights on the west side of Glenwood Avenue are limited to 40 feet (except those areas in the Neighborhood Business district). The heights along the east side are permitted up to 60 feet by rights with potential heights up to 132 feet when certain building design performance standards are met.

The 2008 amendment reduced the amount of parking required to 1 space for each 400 square feet of building floor area. In addition, no parking is required for the first 10,000 square feet of any structure and new parking standards were set for bars and nightclubs. This is one of the few PBOD plans that incorporate building design elements that impact the public realm.

Oakwood Mordecai Business District (1987 with amendments through 2006)

This streetscape and building design plan along Person Street addresses the key urban design components of this neighborhood center from façade design and building heights to lighting and streetscape furnishings. Building design standards are limited to a few basic suggestions which will not carry with them the impact necessary to ensure that the walls of the “outdoor room” of the street are properly treated.

Peace Street Streetscape Plan (2005)

This plan encompasses the area immediately to the west of the Glenwood South Pedestrian Business Overlay District. Included in the plan is a detailed height gradient map that permits the tallest buildings to the south of the study area and a tapering of these heights towards the Brooklyn and Glenwood neighborhoods to the north across Peace Street. The parking plan for this area also recommended a 30% reduction in parking standards and a 45% reduction for the first 2,500 square feet for commercial and recreational land uses. This district also specifically makes reference to 10-2055(e)(2) which

details certain articulation and permeability standards for building wall.

The Promenade at Crabtree (2002)

These standards were completed as part of a redevelopment application for land adjacent to Crabtree Valley. The proposal called for razing the existing structures and replacing them with multi-story, mixed-use buildings. Because this was for a specific site, it was not clear how this development would connect to its surroundings. As a result, it was little more than a Conditional Use District with a site-specific plan. This plan has not been implemented.

Southeast Raleigh Streetscape Master Plan (2004)

On April 1, 2003, the Raleigh City Council adopted an updated Southeast District Plan to guide development in the Southeast District. A portion of the updated plan calls for the improvement of streetscapes along selected corridors. The goal of the Streetscape Master Plan is to improve Southeast Raleigh through the design and implementation of physical streetscape improvements. These improvements will help create a vibrant and unique iden-

tity for the community, support existing businesses and residential areas, and encourage new investment in the community. Unfortunately the plan fails to address how to create places and destinations and instead focuses on “lipstick treatments” of the thoroughfares. There is little attention paid to the interface of the public realm and the private realm with few changes to the overall urban form recommended. This was truly just a streetscape program as a way to beautify the area for people traveling through the area in a car.

Stanhope Center Streetscape and Parking Plan (2002)

This plan was adopted to facilitate the development of the 7.01 acre Stanhope Center that is bounded by Hillsborough Street to the north, Concord Street to the west, the Norfolk-Southern Railroad to the south, and Friendly Drive to the east. It includes all of the required elements as noted in 10-2055(f)(2) with specific attention paid to both streetscape and building design and appears to utilize appropriate urban design principles for the redevelopment of this infill site. This plan has not been implemented.

University Village Streetscape Plan (1986 with amendments through 2004)

The design guidelines contained in this plan are intended to coordinate change to present a common image for University Village, provide a more comfortable and safe street environment for pedestrians, improve the maintenance and general appearance of the University Village district, and coordinate the provision of necessary services to the local community. The plan addressed the following elements: Building Facades, Street Furniture, Sidewalk Design, Street Trees, Maintenance, Utility Lines, Signs, Crosswalks, Parking, Awnings, Solar Access/Building Height, and Sidewalk Café Seating.

This richly illustrated plan is the earliest known urban design plan for the City. This plan has been largely replaced with the plan for Hillsborough Street that is presently under construction. It is not clear to what extent these design guidelines have been utilized or adhered to through the years.

Liveable Streets Plan (2003)

The Livable Streets downtown plan served as a strategic plan for downtown initiatives. The recommendations were distilled into 5 major priorities to be accomplished

in the subsequent 5 years, referred to as the “5 in 5”. Priority #4 addressed the need to undertake regulatory reform but focused principally on building codes (implementation of the rehabilitation code) and sidewalk encroachment issues.

Hillsborough Street Plan (1999, 2008)

In 1999, the community around Hillsborough Street conducted a week long charrette to re-think the corridor that serves as both a gateway to the Capitol and a Main Street for NC State University. Subsequent to this planning process, the Hillsborough Street Partnership was formed to guide implementation of the plan in concert with City and University officials. Phase 1 improvements are currently in progress with the conversion of the Pullen Road/Hillsborough Street intersection to a multi-lane roundabout, the conversion of the Oberlin Road/Pullen Road intersection to a roundabout, the narrowing of the current five lane street section to a median-divided two lane road with additional on-street parking on the outside lanes, and streetscape improvements along Hillsborough Street from Oberlin Road to Gardner Street. Though the original planning considered the entire public realm of the corridor, the final plan only focused on the actual

streetscape. As a result, there is not a clear picture of how the streetscape facilitates development or redevelopment in the corridor.

Raleigh Downtown Urban Design (1989)

This Guide constitutes a set of principles and objectives for the design of Raleigh’s downtown area that are intended to serve as the basis for implementation activities including, as appropriate, changes to the City Code, capital budgets and development incentives. The Guide is a stand-alone document and is not part of the City’s Comprehensive Plan and unless otherwise indicated, the existing regulations concerning building, parking, signage and historic districts continue to apply. These guidelines are not officially part of any regulatory process, but it is unclear if they are being used in an advisory manner. With the exception of specific standards for Floor Area Ratio (FAR) and Building Height, the standards are both general in nature and very subjective. As a result, they would be very difficult to adopt as code without a board to provide the necessary subjective interpretation such as a design review board or a community appearance commission.

Raleigh Urban Design Guidelines for Mixed-use Neighborhood and Village Centers (2002)

The RUDG provides a high-quality best practices guide to constructing neighborhood and village centers. It includes general guidelines for densities and intensities of the various centers and the appropriate context along a combination of detailed and general standards for site, street, and building design. The principles and guidelines that constitute the key ingredients that establish the character of the Mixed-Use Center are denoted as “key elements.” The guidelines, as noted in the document, are not intended to be universally applicable, but rather were targeted to Mixed-Use Centers that were linked to Focus Areas shown in the previous Comprehensive Plan. In practice, these guidelines have been used on a variety of development applications that have utilized the Conditional District or Planned Development District process. Most of the guidelines are explicit and detailed enough to be converted into code by simply changing the word “should” to “shall” and would continue to be appropriate in regulating various mixed-use contexts.

Fayetteville Street Urban Design Handbook (2003)

In conjunction with the redesign of Fayetteville Street, an updated set of urban design standards for the surrounding area was drafted. The result of this process is an update to the Fayetteville Street section of the existing Downtown Urban Design Guide. Like the existing guide, this handbook addresses the interface of public and private spaces and seeks to create an active, accessible, urban environment and respond to the existing civic and historic buildings that make Fayetteville Street Raleigh’s most prominent street. As noted in the Handbook, these guidelines are intended to serve “as both a guide for public and private entities undertaking new construction, rehabilitation projects, and activities in the public right of way, as well as a set of standards by which City Staff, the Appearance Commission, Planning Commission, and City Council can review projects. As part of the City’s Comprehensive Plan and zoning code, these standards will be taken into account in all levels of review, including, but not limited to, site plan review, sign and encroachment permits, outdoor dining and vending, and streetscape plans.” Though this handbook is intended to

be a supplement to the Downtown Urban Design Handbook it far exceeds its parent document in scope and sophistication. Much of this document can be integrated into zoning regulations to further help in streamlining the permitting process.

Stakeholder Interviews and Public Listening Sessions

This section brings together all input gathered during the stakeholder interviews and public “listening sessions.”

Input from the general public collected at listening sessions shown separately from stakeholder input gathered during interviews. For both listening sessions and stakeholder interviews, the document presents themes which were echoed several times from several sources. The document also presents a complete list of comments. To aid with review of this material, comments have been organized by topic. Comments often address multiple topics. However, each comment has been listed only once. Comments are based on the perception of the interviewees and the consultant team makes no claims as to their accuracy or validity. However, even incorrect perceptions often indicate issues that could be of concern. The consultant team will incorporate these invaluable insights into other work tasks as the team analyzes the issues, considers alternative approaches and prepare the UDO.

Following is a summary of meetings and listening sessions attended by the consultant team.

Elected and Appointed Officials

- City Council/Planning Commission
- Board of Adjustment, Historic Districts Commission, Appearance Commission
- Bicycle and Pedestrian Advisory Commission
- Stormwater Management Advisory Commission
- Environmental Advisory Board
- Tree Conservation Task Force

Internal Stakeholders

- Administrative Working Group
- Fire, Police, Parks, and Recreation
- Public Utility, Public Works, Solid Waste
- Planning, Inspections, Community Services, Community Development
- Information Technology, Public Affairs
- City Attorney’s Office

External Stakeholders

- Affordable Housing
- Business Groups (Chamber of Commerce, Downtown Action Group, Downtown Alliance)
- Developers, Builders, Realtors
- Development Services Advisory Council
- Environmental Groups
- Land Use Attorneys

- Land Planners, Architects, Engineers, Surveyors
- Raleigh Citizens Advisory Council
- Raleigh Transit Authority
- Schools, Hospitals

Listening Sessions

- North Raleigh: North Raleigh Church of Christ, 8701 Falls of Nuese Road, 6:00-8:00 p.m.
- Downtown: All Saints Chapel, 110 S. East Street. 12:00-2:00 p.m.
- South Raleigh: Progress Energy Center for the Pre-forming Arts, 6:00-8:00 p.m.

Detailed Stakeholder Comments

Process

- Site Plan approval process needs to be revamped
- Process not very transparent
- Existing site plan process is a struggle
- Need to respond to new Senate Bill 44 – Goes into effect on January 1st
- Dealing with how to conduct quasi judicial hearings during the process – would like to have an interim solution – what cases need to go to Council – something in the next 4-6 months
- Could streamline most processes but still need to have a “special process” to handle the oddballs
- How can we make this a process that is not just a way to give more to the developers? – How do we convert to a more by-right system?
- There is a mixed bag of concerns related to changes in the UDO
- There is a strong ethic of negotiated development petitions for legislative rezoning that is not likely to go away with additional standards
- Blindly looking at one project at a time; need to review the collective impact of numerous projects
- Process should be divorced from the Code; Too much process information is contained in the current code
- Currently fixing the development review process – creating interdisciplinary teams to do development review – looked at Henderson, NV and Sacramento, CA for best practices
- Had a struggle with infill development process – highly discretionary process that includes architectural guidelines and restrictive covenants
- The whole process is a negotiated process
- For existing zoning districts, the incorporation of new development standards that encouraged/allow infill are more administrative
- Not a transparent permit process – seems to be arbitrary
- Site Plan process is very difficult to discern
- They are currently making major improvements in improving continuity
- Change in use requires a site plan process – re-examine what triggers site plan reviews
- All groups are reactionary toward the developers-neighborhoods, city staff, city council
- Can we build a system that allows “by right” with ease?
- Clarify when BOA reviews and when Planning Commission reviews simultaneously
- Engage the State Government during this process
- Process of change is scary – need to educate
- DPRG – Development Plan Review Group – was just a triage before
- There are “tribal ways” that are employed that sometimes differ from that of the actual code in a formal process
- Can an applicant start seeing comments while they are in process?
- Development requirements are expected for public projects: sidewalks, road improvements, but they are not included in a bond issue, because at that time the site is not selected

Cost

- The need to hire lawyers to negotiate process adds cost
- Additional reviews/delays add costs to the project
- Unpredictability (process) adds cost
- Current PDD is cost intensive with potential for denial (detailed drawings required during the rezoning process)
- Raising impact fees to induce incentives (impact fee credit) for new urbanism development is flawed way of thinking
- Incentive based elements (expedited review, density bonuses, fee reductions) – focus on mixed-use center and future transit areas – financing incentives for infrastructure – public private partnership

- Current impact fee is focused on cash as opposed to the construction of facilities
- “Tax everything or subsidize” – got to be tempered – can’t codify all
- Most master plans are done after bond funding and then roll directly into construction

Interpretation

- The code cannot anticipate everything so professional judgment should play a role
- Need for consistent interpretations throughout Code; Code has a lot of gray area
- Different personnel review preliminary plans and final plans, resulting in different interpretations
- Code interpretations in a timely fashion; a prescriptive, black-and-white code could allow for simple staff reviews to happen more frequently than the code now allows for; however, if the developer wants flexibility in the application of the regulations, then it may cost more, take longer, and require a public review
- Need more objective standards for infill development
- Want to have a clarity of interpretation
- Administrative discretion is a double-edged sword; how far could/should it go? It might result in staff corruption.

- Need more consistent interpretations with all of the various manuals and codes

Timing

- Fast-tracking the process (group preliminary, construction drawings, final); currently a linear process (one person holds up the process); new issues arise on the 2nd or 3rd submittal
- Predictability of the process (time). Flexibility and predictability are sometimes at conflict.
- The length of the review process (public hearing, numerous committee meetings, commission meetings) is hardship on neighbors; advantage to the professionals in charge of getting the plan/rezoning approved
- Incentive basis (expedited review, fee reductions)
- Accountability of staff (getting a question answered in a timely fashion)
- Park master plan process can take up to a year – additional site plan fees and time if its triggered – more time and money
- Outside Attorneys would be looking for speed and predictability

Subdivision

- Currently, no open space required for a standard subdivision. Explore the possibility of open space dedication or fee-in-lieu for residential subdivisions
- Smaller-lot subdivision regulations

- The subdivision regulations should have design standards – clear directives, not policies
- Infill subdivisions problematic. Infill subdivisions should go away

Administrative Approvals

- Create incentives for good design in order for administrative approval purposes (meeting only minimum standards should then require PC/CC approval); there should be incentives for different review processes (administrative vs. public hearing)
- Current criteria for Admin Approval vs. PC/CC is good (the public hearing threshold)
- Would prefer method short of BOA review for minor variances (6” or less)
- Importance of Administrative Approval w/ no public hearing
- Change-of-use can unnecessarily require formal site plan review
- Plot plans / Site plans are out of balance in regard to rational nexus for required public improvements; more thought should be given to administrative/public hearing review threshold; need to better define what is a site plan vs. what is a plot plan
- Need for “bundling” of construction drawing/final site plan reviews
- Clarify that process approvals cannot come before both the BOA and the PC. Need more clarity on what

the Board of Adjustment can hear and when in the process; avoid overlapping reviews

- Current site plan standards require that all buildings over 80 ft are reviewed by Council
- Thinking about using a review/hearing officer
- There was a major re-organization recommended by the DSAC (Development Services Advisory Council) to be more customer service oriented – wanted to make the process more predictable
- Desire to fast-track the permitting process – there might too linear a process as opposed to having reviews running in parallel
- [Parks and civic properties] have to go through the development process – treated the same as the regular developer – need to find a way to balance fiscal responsibility and public input
- Would like to have civil plans allowed to be submitted before the building permit set – the staff is currently trying to figure out how to separate the grading plans from the building permits
- CDs do not have a site plan attached – less than half of the subsequent site plans do not require council approval/public hearings
- Development requirements for off-site improvements for access and sidewalk need to include a percent of budget for infrastructure

- There is no modeling of development alternatives for the site review; how can people visualize what is proposed?

Rezoning

- The city should rezone – not individual property owners
- Minimum size area / # of lots necessary to submit a rezoning case
- Land Banking of zoning – if rezoned and not developed within a designated time period should revert back to previous zoning
- Should we allow ex parte rezonings?
- 99% of the rezoning cases are conditional districts

Public Involvement

- There don't seem to be too many public hearings and only about 25% are contentious
- The timing of neighborhood input occurs too late in the process
- Public Notification (area should be increased)
- Get rid of the public process for non-residential development within 400 feet of residential
- Education process for the neighborhoods to alleviate fears of change
- Valid Statutory Protest Petition (area needs to be increased)

- The problem is that the neighbors aren't paying attention until the zoning sign goes up
- There is public engagement for a public master plan and then public input again for the various improvements – not many changes from the master plan to the final construction
- How can the BPAC be part of the site plan review – Durham currently includes bike/ped coordination on the TAC
- There needs to be empowerment and engagement throughout this process – SERA should be involved

Standards

- Things have been added to the code but nothing has ever been taken away
- Definitions could be better
- Need for adequate facilities ordinance
- Need to blow up the current code and get the best, innovative code
- Write a code that fits with Urban Design Guidelines
- Alternative compliance: Is there a way to offer this with new base standards, to offer some flexibility yet remain objective?
- Let's not prevent the very good just to avoid the very bad
- Eliminate 10-acre minimum for residential development in Thoroughfare District

- The height for townhomes is different than condominiums – 28 ft is not tall enough
- Building height measurement needs clarified
- Can floor area ratios be more predictable and part of the new code?
- Measurement of “building height” confusing. Building height limitations should be explored – how height is measured, average grade should be examined
- Side yard setbacks: existing non conformities that require a variance to legalize existing violation prior to proposed expansion which meets setback requirement. Legalize existing setback encroachments; allow some discretion as to when a variance is needed (no more 1” variances)
- Tie building heights to building codes – 75 ft height+
- The current FAR is too low – a current text amendment is looking to increase FAR
- Would like a prevailing setback tool – some districts already have it
-

Comprehensive Plan

- Better coordinate the multiple layers of plans and code
- Site Plan Standards #2 – “consistent with the Comprehensive Plan;” no site plan can be approved unless it is in compliance with the Comprehensive

Plan, if there is a conflict, the more stringent shall apply is an issue; as stated CP overrides regulatory provisions

- Districts do not match up with CP goals/policies; when adopted, code will trump CP
- Cannot implement CP recommendation unless more administratively-approved projects (too political otherwise)
- Site plan Standard #2 creates conflicts between Code & CP (gives legal status to CP w/ over 700 policies)
- Increased political process came about because of cumulative type zoning districts; rather than down-zoning - adopted CP policies that did not allow something
- City-wide Rezoning (City-initiated) to be consistent with CP’s Future Land Use Map
- Current Zoning Map does not match good urban design within 2030 CP designated growth centers; should pursue city-initiated rezonings to implement Comp Plan
- Citizens’ reluctance to higher density; we need zoning districts that allow for the densities recommended by the 2030 Plan
- Question about whether the 401 plan was still in the new Comp Plan – the Comp Plan is pretty meaty and tough to get through for the layman
- There was no modeling/illustrations used during the Comp Plan for site specific issues

- The current zoning requirement is that the more stringent of the code and the current comp plan differ
- Comp Plan faithfully incorporated AHTF recommendations
- Will this include new zoning districts and what will decide those – the comp plan?
- Would ultimately have the Comp plan shrink and take out the Small Area Plan
- There are political pressures – can the vision of the Comprehensive Plan really be achieved?

Tree Ordinance/Landscape Ordinance

- The tree ordinance should be examined
- Problem with requiring allowing the various easements, tree conservation areas
- A lot of landscaping requirements were set up as a suburban model and need better urban landscape standards
- The current landscape ordinance is very objective and very uniform across the city
- Urban Design Guidelines conflict with Transitional Protective Yards/TCA
- Tree conservation (alternate methods of compliance)
- Trees- need flexibility when neighbors don’t want the buffer; regulations need common sense - they don’t save the best trees

- TIAs and Tree Conservation add cost
- Tree Conservation Ordinance – requires trees to be saved along thoroughfares instead of in the rear adjacent to residential (buffer)
- Tree Conservation Areas (per Ordinance) need to be reconsidered, especially in urban areas
- Trees within NCDOT-controlled roads
- Tree Conservation / Landscape Ordinance within urban areas results in high cost with little benefit
- Problems between thoroughfares and trees
- Lack of flexibility of Landscape Ordinance/Tree Conservation Ordinance
- Enabling legislation for tree conservation is flawed
- Lack of flexibility in tree ordinance is problematic – tree save areas are always in the front, regardless of condition
- Utilities vs. Tree Conservation Areas (utilities override)
- Conflict between sight distance and tree ordinance
- Competing interests in the Code (tree conservations vs. urban-scale development)
- The current code contains obstacles to good development (open space, tree conservation and parking)
- Alternative means of compliance (landscape ordinance) and staff's understanding of intent is working well

- Conflicts between “site distance” and “landscape ordinance”
- Retail “Alternate Method of Compliance” for landscape regulations
- The tree conservation priorities were to protect the trees in the ROW; Have a conflict with development needs in addition to utilities
- The landscaping ordinance requirements has buffer yards that are often areas where the utilities want to go; street trees are required to be installed but outside the public right of way with the exception of the pedestrian business overlay districts
- Tree preservation – looking for flexibility, fee in lieu, alternative methods of compliance for right of appeal

Signs

- Sign Ordinance (more flexibility) – Projecting signs in Downtown
- No flexibility within Sign Ordinance for Shopping Centers
- Minimum 30-foot setback requirement in order to allow a ground sign conflicts with a desire to move buildings closer to the street
- The only “one projecting sign per premise” needs to be amended
- Campuses signage has to use business model
- Need to accommodate new LED signs

- Need larger signs for parks and specifically park buildings (including schools)
- Projecting signs and neon in downtown are needed
- The new MUTCD will regulate signage in new parking lots just like in public ROWs
- Do not currently allow for advertising on [bus] shelters
- Need more flexibility in signage
- They are current conflicts with the UDG and the signage
- Look at the definitions of signs (wall signs)
- Downtown Raleigh Alliance (DRA) – Signage for multi-tenants, process and regulations, DRA's Retail Analysis (send to consultants), DRA's Business Improvement District Map (send to consultants)

Uses

- Would like to make a difference in the various shopping center districts
- Conditional use zoning (conditions should be limited to zoning/subdivision subject matters); conditional use zoning is difficult to enforce and interpret
- Use of Conditional Use District zoning assumes that code is not strong enough
- More objectivity of SUP standards
- How uses and density interface

- Existing zoning is inconsistent (more intense) than built environment
- 2 separate actions related to site plans and 1 related to pawn shops - made about 90% of pawn shops non-conforming
- Would civic use standards be appropriate?
- Allow too much retail – particularly Capitol Blvd
- Issues with Residential, MF and Apartment complexes connecting to the larger network
- Look at O&I 2 for adding retail
- Use conditional use rezoning, will the code guide land development plans in a similar way?
- “Good Neighbor Plan” – Convenience Stores
- How will the new code deal with undesirable uses?

Districts

- Zoning districts: limit the number of them?
- Can we keep the old districts and only allow the new districts to be used?
- Is it possible to create some incentive based districts that might run in parallel to the existing districts?
- The PDD allows for retention of future value of land
- Property owners prefer flexible zoning districts
- The Thoroughfare zoning district is too “open”
- Look at collapsing the number of residential districts – then look at performance standards

- We need more small lot districts
- Contradiction between the thoroughfare district and the urban design guidelines
- Form-based overlays very popular- would like to get away from these
- A mismatch in abutting zone districts example: R6 next to R4 zone, but the R4 is presently built at R2; complicates the conflict

Downtown

- Look at best practices in Downtown Development (more restrictive than 10 years ago; parking, open space, tree conservation)
- Transitional Protective Yard (Buffer Yard) requirements within Downtown/ Urban setting are problematic
- Current maximum height allowances cannot support urban setting
- Site-by-site drainage mitigation in downtown may be cost-prohibitive
- City needs to clearly define areas that need to be urbanized (welcome redevelopment) and define those areas that the City does not want to change
- Is this City ready for tall structures on the ROW or not?
- Urban core – urban neighborhood – suburban (high density) – suburban (low density)

- Consider some open space with more urban space with downtown – wider sidewalks, etc
- Issues of infill development and context sensitive design need to be addressed

Urban Design (includes Transitions)

- Competing objectives (tree-lined thoroughfares vs. visible retail)
- Ugly apartment attachments; tear downs
- The appearance commission has no tools for evaluating the building envelope, but parking lots are made to engineered precision
- There are material quality issues (Morrisville does not allow EIFS)
- Do not discourage “good” design
- Code lacks design flexibility to achieve a better result. There is a lack of design standards in the current code – especially related to design materials; the current code is too objective – need more flexibility to be creative
- Urban design is more subjective than perhaps an engineering concern because it isn’t easily quantifiable
- Code does not address good urban form (setbacks, landscaping) and pedestrian connectivity
- Unity of Development Regulations have not resulted in good design

- More appropriate transitions need to be made between development, the location of services, building design (height, bulk), lighting, parking, etc. need to be addressed, not just landscaping
- Transitions between uses (architecture)
- Now have authority to do incentives related to sustainable design
- Other Best Practices – can we move into LEED ND? More density if we follow LEED ND?
- Tall buildings and setbacks are an issue, will buildings closer to the street be acceptable to Raleigh citizens
- Must include key elements for design, design a toolkit
- Five Points is an example of a good transition
- Development on small scale sites; these do not have much opportunity for stepping down, buffering, etc. Wilders Grove (K-Mart), South Hall Road (low quality), 5401 (mixed use)
- Modeling is needed, of parkways with urban edges; how, perhaps, one could combine the two?

Mixed Use

- Explore the high cost low benefit items – removing trees in urban mixed-use areas and redeveloping parking lots
- Write definitions clearly and define what a mixed community really is

- Mixed-Use (required) is not appropriate throughout the entirety of the City
- Neighborhoods will continue to be threatened by M-U mid-rises.; what kind of community tolerance will there be for developers being allowed to have some by-right development?) “People are afraid of change;” resistance from neighborhoods – concerns about parking on streets; more traffic in neighborhood
- Lack of Mixed-Use districts options
- Current Code makes vertical Mixed-Use a challenge; we need to take a stronger look at how to make it happen
- Mixed-use Projects (vertical) have been process cumbersome; the mixed-use concept is hindered by parking requirements, and only one use on a property
- The mixed-use concept has been a challenge when it is paraded around and becomes just a charade for single-use retail – also issues with other conflicting standards
- Don’t require mixed use but allow it to occur all over – be sure that the definitions are appropriate
- Need a mixed use code – need to undo the segregation of uses
- There is very little tolerance for mixed-use near existing neighborhoods
- How can we create walkable mixed-use areas?

- Need to create realistic urban mixed use centers – not all areas of the City are or can be mixed-use
- Phasing of mixed use; want to be able to develop one type of use first, to follow the market, and leave room for the second use

Open Space/Public Space

- “Raleigh is a park with a city in it”
- Public Open Space – no definition; open space needs to be defined uniformly throughout the code; we need a master plan for open space that allows flexibility and has a pattern that enhances human development
- Would like to spread around more pocket parks
- Guidelines for open space, urban design
- Open Space vs. Density conflicts (How to achieve both?)
- Perhaps there could be a fund to pay into for open space
- The requirement of open space on tall buildings is odd
- Current plan only includes the amount of neighborhood and community park facilities per 1000 – no current requirements for facilities – focus is on getting cash for land and horizontal development
- Loss of open space
- No current requirements for neighborhood level park facilities other than as “open space”

- Codify the interconnectivity of natural areas
- Would like more common open space in the neighborhood
- Public Space Study is on hold and subject to staff resources. It was intended to review all of the non-travelway issues within the ROW (trees, sidewalks, utilities)
- Involvement with development as a greenway is constructed
- Suggestion that developers build greenway and dedicate it
- Need to consider context and as it related to the environmental quality
- Set aside open space that connect to other open spaces and that are part of a larger
- Identify road that a greenway crosses
- Need at least 10 feet for the greenway
- Greenways that are developed as private and then dedicated to P & R
- Protecting the greenways from parking

Environment/Sustainability

- Perhaps the city could incentivize use of “green” elements
- Allow community gardens within residential districts, promote urban agriculture
- Landscaping should enhance urban wildlife

- Only allow development where the infrastructure is located
- Reduce impervious surfaces
- Need to include incentives to do environmentally-friendly development
- Reduce greenhouse gas emissions
- Low impact developments
- Habitat conservation
- Invasive species control
- Visit Wetlands Education Center
- Greenways need protection from erosion
- Forestry management is needed
- Promote urban conservation
- Promote use of BMPs for everyone – not just developers
- Encourage working with the Soil and Water Conservation Service
- Environmental education
- Floodplain preservation
- Incentives for LEED
- Encourage “what we do want”
- Make the intent clear
- The code must encourage sustainability and might include performance standards

- The stormwater requirement when going from a surface lot to a building makes no sense
- Too much stormwater run-off
- Need to consider context and as it related to the environmental quality

Housing

- The Comprehensive Plan is the starting point for approaches to affordable housing
- Focus is at the site plan stage
- Allow a second unit on a single family site if one is owner occupied?
- Is there a hearing process associated with affordable housing?
- Want a by-right option to encourage developers.
- Current group housing is very suburban, garden style – has too much separation – and needs more flexibility to be more urban style
- Need ability to cluster cottage homes
- Current code limits of number of unrelated people in one dwelling (4)
- Affordable Housing Task Force recommends incentives vs. mandatory (incentives may include reduced fees, increased density)
- The downtown overlay district incentive for affordable housing – “carrot is not juicy enough” to be useful

- Disperse subsidized housing
- No affordable housing component in the 2000-acre Wakefield development
- Increase facility fees/capacity fees and then reduce in exchange for AH component
- Expand opportunities for utility apartments/granny flats/garage apartments
- Supportive housing Residence Regulations appear to be working well
- Need a definition/clarification of “Affordable Housing”
- Need for “Granny-flats” and Garage Apartments”
- Would like the new code to explore inclusionary zoning
- Existing affordable housing needs to stay affordable
- Need to manage the inclusionary zoning expectation – the current downtown ordinance allows for some tiering related to inclusionary zoning
- Consider inclusionary zoning through incentives?
- Should we raise impact fees up higher and then bring them down as an incentive [for affordable housing]
- Some current thresholds are too large and push projects into condo docs (e.g., minimum 10 acres for MF)

- There is a utility apartment rule – the apartment needs to be attached – detached units are not the most important issue
- There is a minimum of 400 yard radius requirement for group homes – has not run out of available properties on which to build
- The City has a rental registration program – since April, 2009 (target was student housing)
- Need to consider more incentives for affordable housing before a firm requirement
- Fair housing – parking reduction
- NW corridor is least served area
- “Supportive Housing” – runaways, recovering addicts, mentally challenged, 400 yd separation, purpose was for distribution
- Millbrook/Leadmont – lots of services already there but the upzoning for increased housing density was voted down by Council
- Student rentals vs. ownership; assumption is that ownership leads to more stable neighborhood

Historic Preservation

- There are 25 national register historic districts but only 5 are protected
- Need to recognize that National Register Historic Districts are important assets to be protected
- Historic viewscapes

- Weave historic preservation into the code
- Include proactive courtesy reviews of projects in National Register districts
- There is a conflict between the housing code and the preservation demolition by neglect ordinance
- The Certificate of Appropriateness process does not have an economic hardship provision
- There are gaps between adjacent HODs
- If a neighborhood has enough character to be listed in the National Register, then perhaps there can be an automatic NCOD
- NCOD – applying it mathematically for character enforcement is very difficult
- In the commercial area there is a potential conflict with the 10% height. The RHDC would like that to only apply to residential neighborhoods
- National register districts coming down the pike are mid-century and on larger lots; In neighborhoods with ranch houses it is very easy to add on anything – no matter how awful
- Teardowns are a problem because there is a mismatch between the housing of the 20s and 30s and the zoning code; people buy multiple lots, combine and re-build
- Perhaps have a similar demo delay in NR districts
- Require a plan for construction prior to issuing demo permit

- Civil War sites/ archaeology; how to “protect” these sites?
- The last historic district was designated in 1984; this may reflect a resistance to designate; perhaps other tools, such as a conservation district, and improved underlying zoning, are needed as alternatives
- Upzonings in an HOD could result in tear-downs
- Ghost lot lines allowing inappropriately-sized lots via recombinations
- Contextual infill guidelines are needed – not just for height and pitch
- The current NCOD is insufficient because the neighborhood and pick and choose what characteristics to survey
- Consider a mid-step historic overlay district
- How will the new ordinance treat NR districts; one size does not fit all
- The ordinance currently does not recognize national register properties
- Some people in NR districts are ready for local ordinances
- Struggle in neighborhoods about how to conserve character – not comfortable with current approach
- Last residential historic overlay district was put in place in 1984
- The NCODs started when a lot of the restrictive covenants in the neighborhoods expired and then

wanted more regulatory tools – the neighborhoods that have it are very happy – designed to apply to neighborhoods that had a fair amount of uniformity – the challenge is when there is a diversity of lot sizes

- A lot of the NCODs are areas where the underlying zoning is not appropriate
- NCOD can’t prohibit already permitted uses such as apartment or townhomes through a maximum lot size
- NCODs are more recent neighborhoods and often are not historic; not intended to replace historic districts
- The ordinances need to better value the historic districts
- Demolition delay is only 365 days in the preservation ordinance; link to the building permit?
- Relying on covenants to protect character: Who enforces? These are hard to sustain
- How will we handle the fragile neighborhoods?
- But there is such a diversity of neighborhoods. How to deal with this? Should setback ranges be established?
- The NCOD is not seen as “preservation light;” it does not address enough of the issues related to preservation; is there some other tool?

Transportation

- Multifamily street connectivity; many streets do not connect, and may not in the future; this will continue to create pressures on certain arterials?
- Private streets vs. public streets; Private streets have been used because they offer more flexibility in design. How are the standards to be addressed? Are they to be different? Are private streets to have more flexibility? How is the regulation of encroachments handled in these cases?
- Is there a way to front-load the roadway design and coordinate with the State to resolve issues early
- Need to better define roadway design standards
- Need to speak with the fire department – increased radius, maneuverability, wide streets – on site standards not necessarily neighborhoods
- Lack of definition of what is a major and minor street
- The Streets Manual is handled through Public Works; Chapter 3 of the handbook was originally part of the code but separated; would like to be more prescriptive with the new standards; focus on corridor overlays to better classify streets based on the Comp Plan
- No clear guidance on the collector streets and below in the plan; would like more sensitivity on ROW widths and urban design standards
- Connectivity – link and node is recommended. Is this the best standard? Is it too mechanical?

- Private streets are only permitted in group housing or MF only; have to put public easements on private streets; would like to move to broader public streets application; currently the standards are larger for public streets and each street must have a water line
 - Connectivity in legacy shopping centers could be challenging
 - Connect development nodes with better transit
 - Is the 1500 foot public street connectivity standard adequate? Should investigate the Virginia model – non-connected subdivision do not get benefit of city maintenance
 - We need to look at transit stops, and make sure there is adequate pedestrian infrastructure associated with them; developers should be required to provide bike/ pedestrian/ transit connections
 - Wide streets can narrow at intersections, creating safety issues
 - Transit “hub & spoke” formula does not work; the greenways help me bike to work—taking a bus would take me 1 ½ hours due to connect the hub and spoke route system
 - Level of service improvements required for bus stops
 - There are a lot of bus stops where there is no sidewalk; riders might have wait in standing water or a ditch
 - The City would like to see multiple hub-type connections, especially at major intersections; cross-town connections are challenging
 - Transit planning is currently based on a 5-year horizon; we want to go to 15-year; that’d include possible rail connections
 - Include Park and Rides in transit planning, utilizing existing parking areas
 - New code should allow public alleys
 - Over time, Homeowners Associations cannot afford maintenance of private streets
 - R-O-W dedications vs. dedications
 - Looking at greener streets vs. curb and gutter
 - Some problems without curbs
 - Won’t take over alleys for maintenance and really don’t like anything less than 16 feet for alleys – would be ok with 12 ft but won’t send a trash truck down it
 - Fire Department dictates wider private streets internal to development
 - Look to North Hills and other major intersections/ interchanges: North Hills, Cameron Village and Downtown
 - Complete streets vs. low impact design
 - Perception: “Cumulative trip generation impacts of individual projects are not considered.”
 - Bus lanes, pull offs (prefer to stay in traffic)
 - Need to ensure that there are good locations for bus stops
 - Try to encourage bus shelters – city has threshold standards by development types – will transmit to team
 - Include bus interface for larger site plans
 - Current planning is related to current service and planned service and don’t have much integrating future services (beyond 5 years)
 - Transitioning to a 15 year outlook
 - Need some quick interim fixes for the new streets manual – particularly as it relates to smaller order streets
 - Inclusion of park and rides – utilize existing spaces
 - Limit cul-de-sacs and encourage more connectivity
 - Look at tweaking the ROW – more smaller streets
 - Streets – thoroughfare plan, not one size fits all (CLT’s urban design guidelines)
 - How to best deal with auto-oriented environments?
 - 401 Corridor Plan was a good plan.
- Bicycle/Pedestrian**
- The bicycle commission is a new advisory commission.
 - A multi-modal level of service classification system will be forthcoming; this needs to be integrated into the code

- Just completed bike plan in parallel with comp plan
- Concerned about connectivity issues for cycling – connecting mixed use hubs, downtown – we don't want bike paths that go nowhere
- Bike/Ped Commission – Have a newly constituted Advisory Commission and did a plan in parallel to Comp Plan; recommendations were rolled into Comp Plan Question about integrating a bike/ped/transit level of service; can we get these in during this schedule?
- Better pedestrian/bicycle connectivity within residential neighborhoods
- Only 4.2 miles in entire city for bike lanes/sharrows
- Safe bicycle connectivity; roads with high-speed traffic and narrow lanes are not suitable for bike travel
- Cyclists need more than travel lanes—they also have to have a place to park
- All-weather bicycle parking
- Safe bicycle signage; On greenways, we need to consider bike/ pedestrian interaction—develop etiquette signage for safety...plus provide wider greenway paths
- Specifically plan bike lanes to be suitable for young bicyclists
- Sidewalk connectivity
- Sidewalks on both sides of commercial streets and thoroughfares

- Four-foot wide sidewalks are too narrow; the minimum should be five feet
- Bicycle “side path” not the answer
- Too auto-oriented (not bikeable/walkable)
- NCDOT appears to be pushing the Complete Streets approach, and bike lanes are an important component of that; we need to include bike lanes in upcoming rounds of resurfacing
- Need for bicycle storage facilities (short term / long term); bike facilities should be designed for security; “more than a tree, but less than a garage”
- Include bike parking at all transit hubs
- Bicycle/pedestrian connectors (if not auto) between cul-de-sacs
- Bus lanes / crosswalks / bicycle parking
- Consider the environmental impacts of the impervious surfaces created by new bikeways and sidewalks
- Sidewalks: we need to do a better job of creating a welcoming pedestrian environment; too often they are being installed right next to high-traffic roads, and away from buildings

Walkability

- We need to connect areas better; some components don't lead anywhere—sidewalks that dead end, lack of on-street bike lanes; our transit system is hub and spoke, but those aren't the routes many people need

- The bike plan covers recommendations for new bicycle plan
- Need to have bicycle parking standards at the destinations
- Need to give special consideration to transit stops (bus or rail) – focus bike/ped infrastructure
- Connect bike/ped with new development
- New crosswalk facilities adjacent to new development
- 5 foot sidewalks – currently required
- Transit stops and pedestrian infrastructure need to support each other
- New crosswalk facilities adjacent to new development

Parking

- Current code doesn't give credit for public parking on-street. Lots of private streets were requested to come into the City system in the 90's; issues with other regulations may come into play
- Requirement for all buildings to be addressed, which requires parking lots to be classified as private streets, which unnecessarily results in greater standards
- Front yard parking is an issue
- Structured parking, efficient use of land; the code has created some building trends that are not necessarily satisfactory (i.e. structured parking)

- There is a disconnect between streetscape requirements and desired appearance with big box retailers and surface parking
- Parking on floors 2 through 8
- Senior housing and parking requirements (too much required)
- Lots of desire to reduce parking requirements in Senior Housing that are more than just age-restrictions than services
- Revise parking standards – too much required parking
- Parking issues (too much required)
- Parking regulations need new look – more flexibility
- Parking in Downtown should be viewed differently – more flexibility
- Duplex dwellings only require 1 parking space/unit
- Parking for stadium- didn't feel like they needed it- students already on campus. Need way to prove reduced demand and get an exception
- Neighbors (of schools, hospitals, and government) should consider a residential parking permit system
- Townhouse Parking not required to be shared, resulting in deficiencies at peak times
- Required parking for stadiums too high – most walk from campus buildings
- Parking at campuses should have lower requirements – most don't have cars
- Conflict between parking required for restaurants vs. drive-throughs
- No parking on grass
- Need to establish parking maximums; can the location or parking and maximum percent of impervious surface be explored?
- Office building on 3700 Glenwood Ave – too much parking was required
- Current process allows for a shared parking process but only through a special long process
- Dormitory Parking- treated like a standalone apartment building, but campus has lower demand
- Look at shared parking requirements
- Senior housing parking requirement – need to go to the BOA for variances
- Can we go back in a fill in the gaps between the sidewalk and the building (parking areas)
- Campuses should have an overlay district or new zoning district
- Stadium issues need to be addressed
- No Raleigh Christian Academy expansion issues with existing stadium, had to get special use permit after the fact
- Transition yards unrealistic – made to preserve dying trees w/retaining wall
- Campuses – bad densities, bad behaviors effect neighborhoods
- Student housing – what is it – how to manage it
- Institutions in residential districts get re-thought
- Development process needs to go more smoothly
- Building heights; Campus density; Lighting; Stormwater; Safety and security; Transition yards
- Public access issue
- Peace College signage outside and inside campus
- How to work with campus master plans- don't always share them with city
- Neighbor issues- edges
- Building Green is harder than conventional building
- Stadium needs \$25k stadium permit, but wasn't told in site plan review
- Public schools don't have to get the permit- unfair; want equity of private vs. public schools

Campus and Institutional

- Campuses – most issues because single parcel vs. parcel out the buildings
- Impact on fragile neighborhoods
- To build 2 new buildings at Meredith required entire campus Site Plan; site plan- single huge parcel- have to show ALL details of whole site, even for small project. A lot of unknowns in site plan process

Format

- Consolidate uses within table of permitted uses. It would be nice to have allowed uses grouped in the new code, as opposed to a long list
- Code cross-references are too numerous
- The current cross-referencing has been good up until recently
- Remove the ambiguity of the ordinance – better illustrations

Public Works

- Solid Waste Regulations should be put in the Code
- Have a solid waste design manual – need to be sure to better broadcast it
- Bad use of retaining walls, unnecessary cut & fill; the cut/fill allowance seems excessive – there is no thought given to topography preservation; buildings can serve as a retaining wall
- Currently only requiring reservation of right of way for state
- There is a conflict between tree preservation and storm, sewer ROW
- Stormwater design manual is online
- Do their own sedimentation and erosion control system
- Parks maintenance is moving towards lower water intensive areas

- Location of utilities and new street sections
- Fire Stations use the same code as the underlying zoning; no Institutional zone district?

Miscellaneous

- Framing of the conversation for what is allowable/ appropriate development
- Raleigh is “raise-a-family” friendly and people move here to enjoy a suburban lifestyle
- Things are the way they are for a reason – if we don’t provide the housing / shopping desired by suburbia, a surrounding jurisdiction will
- A number of small lots areas get a higher density zoning because of the lot size but where they are primarily SF
- Development improvements – need to be sure it can install improvements
- Need to meet the minimum state BMP manual – only 6 devices permitted
- Old Raleigh is the only private gated community

Detailed Listening Session Comments

Team members attended three public listening sessions at locations throughout the city. Attendees sat at tables with facilitators, responses were recorded at each table, and at the end of the listening session, a representative from each table presented the group's responses to the larger group. The following questions were used to get people talking about relevant issues that mattered to them:

- What is the single greatest concern you have with the current regulations?
- What do you see as the most significant inconsistency between the recently adopted Comprehensive Plan and the existing development regulations?
- What works and what does not work in the current regulations? Of the items that are not working, what are the greatest problems? What provisions are consistently difficult to interpret?
- What do you think are the most successful aspects of the current regulations? Are there great projects you can point to? If so, where?
- What suggestions do you have to make the code more user-friendly?
- Does the current review system strike a good balance between the need to process applications in a timely

fashion and the need to allow for public participation?

- There may be a need to refocus the emphasis from “suburban” to “urban” in certain growth areas. What does this mean in terms of factors that might need to be considered?
- What new or emerging issues are not addressed (or not adequately addressed) in the current regulations that should be included in the Unified Development Ordinance?
- Are there types of development in other places that you would like to see in Raleigh? If so, where?

Top Issues

- Balance between uses; flexibility
- Public involvement is important
- Predictable approval process, Predictability in the process
- Mixing of uses is important
- Focusing urbanization within Core Areas, Density has a place
- Variety of housing choices
- Redevelopment of existing strip centers
- Piecemeal rezonings
- Altering traffic patterns
- Green balance – how we use the land (i.e. parks/greenway/public space); Public space guidelines

- Transit – park & ride initiatives; Mixed-use to support transit
- Protection of older neighborhoods; Diversity of neighborhoods
- Code clarity; Ease of use of Code w/ predictability; Process improvement
- Code consistent with Comp Plan
- Leadership to support application of the Comp Plan
- Transitions (use & bulk)
- Impacts from Institutional uses
- Design and Urban Form
- Affordable housing
- Building context / Site Design context in the Code
- Public education
- Better define density (1-bedroom apt. and 4-bedroom apt. both equal 1 dwelling unit)
- Mixed-income housing in all parts of the City
- Graphic representation (3-D)
- Edge planning
- City needs to be proactive in designing growth centers and zoning
- Too much required parking
- Too auto-oriented; need transit-oriented
- Tools needed for redevelopment in accordance with Comp Plan

- Connectivity
- Balance between administrative approval and public input
- Form-based zoning
- Sustainability

General

- You can't have one-size fits all zoning
- Wonder if the new code update can handle the diversity of development
- Redevelopment is the future of development
- Accountability (bait & switch) of appearance of final product
- Would like to see more predictability

Process

- Process should be more user-friendly
- There is currently a lack of clarity to case processing. It is difficult to determine what process to go through
- Rezoning process (community and developers pitted against each other)
- Flexibility is key to development - Predictability is needed: Meeting the code should qualify a project for approval - Take politics out of the process
- Get the code right so staff can be more empowered to approve projects

- "Conditions" imposed to re-zone – at mercy of approval
- Piecemeal rezonings
- Planning Department approvals are not always neatly followed by the Inspections Department. Sometimes things are lost as a project transitions through the pipeline
- The political process should not dictate development, the code should
- Why does infill require City Council approval?

Public Involvement

- Neighborhood input comes too late in the process
- Would like to see more neighborhood notification of development – not just rezonings and public hearing items

Standards

- Need for form-based zoning comprehensively throughout the City
- Need to find the balance with the regulations while still allowing the market to be creative
- Good design principles need to be in the Code and not guidelines/policy
- Lack of prescribed Urban Form
- TCA's are in conflict with the UDG's
- Don't want the new regulations to be too complex

- There are too many conflicting layers of regulations and overlays
- Even staff confused by code – get rid of outdated sections

Comprehensive Plan

- Don't like the policies in the new Comprehensive Plan which could restrict development in the flood plain

Tree Ordinance

- Current tree code is "wrong"
- Tree conservation & Comp Plan vary

Historic Preservation

- Concerned of impact on older neighborhoods
- Existing neighborhoods being severely impacted (natural systems) by unregulated development
- Old code – afraid to lose some "good" items – leave densities in older/historic neighborhoods
- Existing zoning does not reflect built environment within older neighborhoods
- Need to retain history and sense of place
- Need to define neighborhoods for character purpose (small retail, mix of densities)
- Development / rezonings encroaching on existing neighborhoods without adequate transitions
- Day cares are problems for neighborhoods

Context

- The spatial context of the area needs to be factored in
- Lack of contextual standards
- Like the idea of context sensitive infill
- How do you make a good transition from Urban to Suburban.
- Densities in the right place
- High density is not inherently evil...when done in proper context

Urban Design

- Code requires setbacks that are too large
- Stop dead-end neighborhoods and cul-de-sacs
- Fake Main-street developments are not the answer
- Code should provide flexibility to address market changes and design flexibility

Mixed Use

- Like the idea of allowing small neighborhood retail in areas largely used for residential
- Zoning severely segregates land uses (no opportunity for 'Mom & Pop Grocery')
- Would like to see more mixed use (in the right places).
- Current Code encourages increased density and mixed-use, but it is difficult to achieve

- Mixing uses on small sites often is not practical
- Multi-story/Multi-use buildings are not warranted in many locations especially along major roadways that don't support walkability (high-speed/multi-lane)

Transportation

- Roads are designed for getting cars from point A to point B as fast as possible without respect for pedestrians/bicycles
- Bus service – more park & ride
- Predictability in transit
- Transportation areas – need more scattered
- Code needs incentives to promote transit
- How can the code encourage the density to support mass transit

Parking

- Need more parking in high density residential (NCSU)
- Don't implement parking maximums
- Parking regulations require more parking than is needed; Huge parking fields, if they are going to be built, they need to be broken up more with trees and landscaped areas

Open Space / Public Space

- Public open space should lead land-use planning
- More on-site bio-retention is needed to protect water quality
- Amount of open space in neighborhoods – more useful space than perimeter areas

Housing

- Variety of housing choices limited
- Don't like the idea of mandatory inclusionary zoning
- Need to nurture diversity throughout entirety of City

Code Format

- Graphic representation for urban form and land use transition (user-friendly)
- Ease of use and organization of Code
- Get rid of * in the code/cross-references
- 3-D tools visualization